S. HRG. 101-256

NOMINATIONS—JULY

HEARINGS

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

NOMINATIONS

JULY 12, 1989

JANICE OBUCHOWSKI, TO BE ASSISTANT SECRETARY OF COMMERCE FOR COMMUNICATIONS AND INFORMATION, DEPARTMENT OF COMMERCE

JULY 18, 1989

ROCKWELL A. SCHNABEL, TO BE UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM, DEPARTMENT OF COMMERCE

JULY 21, 1989

D. ALLAN BROMLEY, TO BE DIRECTOR OF THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY, DEPARTMENT OF COMMERCE

JULY 25, 1989

GILBERT E. CARMICHAEL, TO BE ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

JULY 31, 1989

JANET D. STEIGER AND DEBORAH K. OWEN, TO BE COMMISSIONERS, FEDERAL TRADE COMMISSION; JOHN A. KNAUSS, TO BE UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE, DEPARTMENT OF COMMERCE; ALFRED C. SIKES, SHERRIE P. MARSHALL; AND ANDREW C. BARRETT, TO BE COMMISSIONERS, FEDERAL COMMUNICATIONS COMMISSION

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Committee on Commerce, Science, and Transportation

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CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

JULY 12, 1989

Page
Opening statement by Senator Inouye 1
Opening statement by the Chairman 2
Obuchowski, Janice 21
  Biographical sketch 3
  Prehearing questions of the Committee and the answers 6
  Posthearing questions of the Committee and the answers 24
    Warner, Hon. John, U.S. Senator from Virginia, prepared statement 2

JULY 18, 1989

Opening statement by Senator Rockefeller 37
Opening statement by Senator Burns 38
Opening statement by Senator Bryan 39
Opening statement by Senator Lott 40
Opening statement by Senator Pressler 58
Schnabel, Hon. Rockwell Anthony 54
  Biographical sketch 43
  Prehearing questions of the Committee and the answers 47
  Prehearing questions of Senator Rockefeller and the answers 52
  Wilson, Pete, U.S. Senator from California, statement 41

JULY 21, 1989

Opening statement by Senator Gore 65
Opening statement by Senator Stevens 68
Opening statement by the Chairman 69
Opening statement by Senator Pressler 131
Opening statement by Senator Rockefeller 144
Bromley, D. Allan 112
  Biographical sketch 72
  Prehearing questions of the Chairman and the answers 82
  Prepared statement 115
    Dodd, Hon. Christopher J., U.S. Senator from Connecticut, prepared statement 70
  Lieberman, Hon. Joe, U.S. Senator from Connecticut, statement 70
  Posthearing questions of the Chairman and the answers 168
  Posthearing questions of Senator Inouye and the answers 170
  Posthearing questions of Senator Gore and the answers 174
  Posthearing questions of Senator Kerry and the answers 182

JULY 25, 1989

Opening statement by Senator Exon 195
Opening statement by Senator Lott 196
Opening statement by the Chairman 198
Carmichael, Gilbert E. 210
  Biographical sketch 199
  Prehearing questions of the Committee and the answers 202
  Prepared statement 213
  Cochran, Hon. Thad, U.S. Senator from Mississippi, statement 196
  Montgomery, Hon. G.V. (Sonny), U.S. Representative from Mississippi, statement 210

JULY 31, 1989

Opening statement by Senator Bryan 227
Opening statement by Senator Kasten 228

Page

- Steiger, Janet 242
  - Biographical sketch 230
  - Prehearing questions of the Committee and the answers 235
  - Kohl, Hon. Herbert, U.S. Senator from Wisconsin, statement 229
  - Posthearing questions of Senator Bryan and the answers 247
  - Posthearing questions of Senator Gorton and the answers 251
    - Hanaway, Donald J., attorney general, State of Wisconsin, letter 254
    - Kastenmeier, Hon. Bob, U.S. Representative from Wisconsin, letter 256
- Owen, Deborah K 269
  - Biographical sketch 258
  - Prehearing questions of the Majority and the answers 263
  - Thurmond, Hon. Strom, U.S. Senator from South Carolina, statement 257
  - Posthearing questions of Senator Bryan and the answers 279
    - Cardin, Hon. Benjamin L., U.S. Representative from Maryland, letter 282
    - McNair, Robert E., attorney, letter 283

JULY 31, 1989

- Opening statement by the Chairman 285
- Knauss, Dr. John A 309
  - Biographical sketch 290
  - Prehearing questions of the Chairman and the answers 294
  - Pell, Hon. Claiborne, U.S. Senator from Rhode Island, statement 286
  - Chafee, Hon. John H., U.S. Senator from Rhode Island, statement 287
    - Prepared statement 288
  - Posthearing questions of Senator Gorton and the answers 316

JULY 31, 1989

- Opening statement by Senator Inouye 323
- Opening statement by the Chairman 324
- Opening statement by Senator Packwood 325
- Opening statement by Senator Gore 325
- Opening statement by Senator Kasten 326
- Opening statement by Senator Danforth 326
- Sikes, Alfred C 351
  - Biographical sketch 332
  - Prehearing questions of the Committee and the answers 338
  - Bond, Hon. Christopher, U.S. Senator from Missouri, statement 327
  - Posthearing questions of Senator Breaux and the answers 352
  - Posthearing questions of Senator Packwood and the answers 358
    - Robertson, Pat, chairman of the board, Christian Broadcasting Network, Inc., letter 482
    - Armstrong, Ben, executive director, National Religious Broadcasters, letter 482
    - Zimmerman, Thomas F., president, Luzon Committee for World Evangelization USA, letter 483
- Barrett, Andrew C 371
  - Biographical sketch 359
  - Prehearing questions of the Committee and the answers 362
  - Simon, Hon. Paul, U.S. Senator from Illinois, statement 328
    - Dixon, Hon. Alan J., U.S. Senator from Illinois, prepared statement 329
  - Posthearing questions of Senator Packwood and the answers 371
- Marshall, Sherrie P 386
  - Biographical sketch 372
  - Prehearing questions of the Committee and the answers 377
  - Posthearing questions of Senator Breaux and the answers 387
  - Posthearing questions of Senator Packwood and the answers 392
  - Posthearing questions of Senator Levin and the answers 392
  - Helms, Hon. Jesse, U.S. Senator from North Carolina, statement 329
  - Sanford, Hon. Terry, U.S. Senator from North Carolina, statement 330
- Moore, E. Ray Jr., executive director, Palmetto Family Caucus, statement 419
  - Prepared statement 422
- Coleman, Peggy, legal counsel, American Family Assn., statement 440
  - Prepared statement 442
  - McAteer, E. E., president, Religious Roundtable, statement 449
  - Prepared statement 454
    - Barrett, Andrew C, State of Illinois Commerce Commission, letter 485
    - Bauer, Gary L., president, Family Research Council, prepared statement 486
    - Hartenberger, Werner K., counsel, Cox Enterprises, Inc., letter 492

NOMINATIONS—JULY

WEDNESDAY, JULY 12, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The committee met at 9:00 a.m. in room SR-253, Russell Senate Office Building, Hon. Daniel K. Inouye presiding.

Staff members assigned to this hearing: Toni Cook, staff counsel; Becky Kojm, professional staff member; and Ruth Johnson, minority professional staff member.

OPENING STATEMENT BY SENATOR INOUYE

Senator INOUYE. I just received word from Senator Warner that he wanted to be here this morning to introduce Ms. Janice Obuchowski, but unfortunately he has been held up with an emergency. So, I have the great honor of presenting the nominee.

We are gathered here this morning to consider the nomination of Janice Obuchowski to serve as the Assistant Secretary of Communications and Information at the Department of Commerce.

Ms. Obuchowski is replacing Alfred Sikes as the head of the National Telecommunications and Information Administration. NTIA serves as the principal advisor to the executive branch on domestic and foreign telecommunications issues. It develops plans and policies for submission before various regulatory bodies, manages Federal use of the radio spectrum and conducts research.

NTIA also plays an important role in conducting trade negotiations with foreign nations and in coordinating U.S. policies for international standard-setting organizations.

Ms. Obuchowski has a great deal of experience in communications, particularly in the international arena. From February 1987 to April 1989, Ms. Obuchowski was the Executive Director of International Affairs for NYNEX. Prior to this position, she spent seven years at the FCC in a host of jobs, including Senior Advisor to Chairman Mark Fowler.

Ms. Obuchowski has taught International Telecommunications Regulations at Georgetown Law Center; she has served as a member of the USIA Private Sector Advisory Committee for International Telecommunications, and as chair of the State Department Subcommittee of the Private Sector Advisory Committee on Strategic Standards.

Ms. Obuchowski, I welcome you. If I have another person, I will move to report this out.

I have an opening statement that Senator Hollings would like to have included in the record.

[The statements, biographical sketch, and questions and answers follow:]

OPENING STATEMENT BY THE CHAIRMAN

I am pleased to have the opportunity to discuss the future of our telecommunications policies with Ms. Obuchowski, the nominee to the position of Assistant Secretary for Communications and Information at the Department of Commerce.

NTIA plays an important role in the development of the Administration's policies on domestic and foreign telecommunications issues. The telecommunications industry in this country and abroad is in the midst of a period of rapid growth and technical advancement. It is imperative that the government act quickly and skillfully to encourage the development and implementation of new technologies and work with international organizations to protect the position of U.S. telecommunications companies in the international marketplace.

Ms. Obuchowski has a great deal of experience in the field of communications and seems well qualified to take on the responsibilities of running NTIA. I look forward to discussing with her priorities for NTIA in the coming years.

STATEMENT OF HON. JOHN WARNER, U.S. SENATOR FROM VIRGINIA

Mr. Chairman, it is a great pleasure for me to appear before you today to introduce to the Committee Janice Obuchowski, the President's nominee to be Assistant Secretary of Commerce for Communications and Information and Administrator for the National Telecommunications and Information Administration. I am pleased that Ms. Obuchowski has made her home in Virginia for the past seven years. We consider her one of our own.

My colleague from Virginia, Senator Robb, asked me to tell the Committee that, had he not been called on to preside over the Senate this morning, he would have joined me here today to introduce Ms. Obuchowski.

Mr. Chairman, the positions for which Ms. Obuchowski has been nominated are very important. Here responsibilities include a number of very controversial issues affecting every individual in the United States.

We are truly fortunate that Ms. Obuchowski is the President's nominee for these positions. Ms. Obuchowski's resume is indeed impressive. Mr. Chairman, I know that you and the members of the Committee have Ms. Obuchowski's resume before you. I will point out, however, Ms. Obuchowski's experience with telecommunications policy and international communications policy in both the government and the private sector. As the Committee well knows, Ms. Obuchowski served on staff at the Federal Communications Commission from 1981-to-1987, when she left to join a major private telecoms firm, handling their international components. This experience provides a knowledge of the issues that ideally suits her for these positions and will well serve the interests of the American people.

Ms. Obuchowski is joined here today by her husband, Bert Halprin, a partner with the Washington, D.C. firm of Myerson & Kuhn. She is also joined by her mother—Mrs. Chester Obuchowski. I would like to take the opportunity to welcome them here today.

Mr. Chairman, I urge the members of the Committee to act swiftly on this nomination.

ERNEST F. HOLLINGS, SOUTH CAROLINA, CHAIRMAN
DANIEL K. INOUYE, HAWAII
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WALTER B. McCORMICK, JR., MINORITY CHIEF COUNSEL AND STAFF DIRECTOR

United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Obuchowski (Last) Janice (First) (Other)

Address: 7016 Benjamin Street
McLean, Virginia 22101
(Current residence)

U.S. Department of Commerce (HCHB)
14th Street & Const. Ave., N.W.
Washington, D.C. 20230
(Business)

2. Position to which nominated: Assistant Secretary for Communications and Information

Date of nomination: June 7, 1989

3. Date of birth: July (month) 20, (day) 1951 (year)

Place of birth: Manchester, Connecticut

4. Marital status: Married

Full name of Spouse: Albert Philip Halprin

5. Names and ages of children: None

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Georgetown Law Center	8/73 to 5/76	J.D.	
Wellesley College	9/69 to 5/73	B.A.	
University of Paris	10/71 to 5/72	(with Sweet Briar College -- Junior year abroad program)	
Manchester High School Manchester, Connecticut	9/66 to 6/69		

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of employer	Address	Type of work
4/89	Present	U.S. Dept. of Commerce	14th St. & Const. Ave.,N.W., Wash.,D.C.	Consultant
2/87	4/89	NYNEX	1828 L Street,N.W. Washington,D.C.	Exec. Director International Affairs
Spring term - 1989		Georgetown Law Center	600 New Jersey Ave,NW Washington, D.C.	Adjunct Professor
4/80	2/87	FCC	1919 M Street, N.W. Washington, D.C.	Senior Advisor to the Chairman*
9/75	4/80	Bergson, Borkland, Margolis & Adler	11 Dupont Circle,N.W. Washington, D.C.	Associate and Clerk
7/75	8/75	Donovan, Leisure, Newton & Irvine	Rockefeller Plaza New York, N.Y.	Summer Associate
6/74	8/74	Georgetown Law Center	600 New Jersey Ave,NW Washington, D.C.	Investigator, Criminal Justice Clinic
8/74	9/75	Georgetown Law Center	600 New Jersey Ave.,NW Washington, D.C.	Legal Writing Teacher & Counselor

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

- Federal Communications Commission, 1919 M St., N.W., Washington, D.C. Employment: April, 1980 to February 1987.
- United States Information Agency, Member, Private Sector Advisory Committee for International Telecommunications, 1987-1989.
- Department of State, Chair, Subcommittee of Private Sector/Advisory Committee on Strategic Standards, Bureau of Communications and Information Policy, 1989.
- U.S. Postal Service, Clerk - Carrier, Summer, 1970.

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

NYNEX Political Action Committee, Employee contributions, 1987-1989.

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*Legal Assistant to Chairman; Chief, International Facilities Planning Division; Legal Assistant to Common Carrier Bureau Chief; Attorney, Common Carrier Bureau, Domestic Facilities Division.

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

1976-1980	American Bar Assn.	Chair, Legislation Comm. Litigation Sec.	Nationwide Hdqtrs. Chicago, Ill.
1977-1979	McLean Gardens Tenants Assn.	Member-Board	McLean Gardens Washington, D.C.
1980-1983	Wyoming Condominium Owners Assn.	Member & Secretary	1848 Wyoming Ave.,N.W. Washington, D.C.

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

NYNEX, Exceptional Merit Award, 1989; Chairman's Special Achievement Award, FCC, 1987; Law Journal Member and Editor, Georgetown Law Center, 1974-1976; Law Club Fellow, Georgetown Law Center, 1974-1975; Wellesley Scholar, Wellesley College, 1973; Honors in French, Wellesley College, 1973; National Honor Society President, Graduating Class History and French Prizes, Manchester High School, 1969.

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

Comment Due Process Protection under the Entitlement Doctrine for Tenants of Federally Supported Housing, 63 Geo. L.J. 1301 (1975).

SENATE CONFIRMATION HEARING

QUESTIONS FOR JANICE OBUCHOWSKI

QUESTION:

1. What are your qualifications for the job of Administrator of the National Telecommunications and Information Administration?

ANSWER:

My qualifications to serve as the Administrator of the National Telecommunications and Information Administration include my educational background, extensive prior experience in communications, both in the private and public sectors, and my commitment to high standards of public service.

My undergraduate training at Wellesley College and the University of Paris focused heavily on international diplomacy and history, as well as the study of French, Italian and Russian. A global perspective and the ability to conduct business overseas is particularly important to bring to representing the interests of the nation's communications industries. At Georgetown University Law Center and thereafter during three and one-half years in private practice of law, my primary focus was antitrust law. Antitrust and economic regulatory issues permeate the telecommunications, mass media, and information industries.

Focusing on my practical experience, as a Junior Associate at Bergson, Borkland, Margolis and Adler, I worked on matters involving the broadcasting and film industries. During my subsequent seven years at the Federal Communications Commission (FCC), I served in a range of career positions, covering both domestic and international telecommunications. I was then promoted into a non-career position as a Legal Assistant and Assistant for International Communications, and then Senior Adviser to Chairman Mark Fowler. These positions provided a broad perspective in the telecommunications and international communications area.

From 1987 until April 1989, I was employed by NYNEX as Executive Director, International Affairs. My primary mission was to assist this major U.S. corporation, with limited prior international experience, to develop a more global perspective. In some ways I see this corporate transformation as a microcosm of the experience that all American high technology companies must undergo, if the U.S. is to retain its competitive edge into the next century. I consider the practical lessons I learned through this experience to be instructive for my new position.

During the last year I have also served as an Adjunct Professor at Georgetown University Law Center, teaching International Telecommunications Regulation in the L.L.M. Program.

Finally and most importantly, I am very hard working and dedicated to serving my country. I consider my nomination to be a tremendous honor. If favorably reported by this Committee and confirmed by the Senate, I commit to bringing high ethical standards and enthusiasm to my work.

QUESTION:

2. What role do you believe that the NTIA should play in telecommunications policy-making?

ANSWER:

NTIA is the President's principal spokesperson on telecommunications and information policy. NTIA will play a lead role for the Secretary of Commerce and the President in ensuring that competitiveness questions, and other issues concerning the communications industries, are fully coordinated within the Executive Branch. Competitiveness is a key component of Secretary Mosbacher's and the President's programs and one where sound telecommunications policy will prove advantageous to U.S. interests.

Because NTIA brings together under one roof the domestic and international telecommunications policymaking expertise of the Executive Branch with the U.S. Government's telecommunications research and spectrum management functions, NTIA is uniquely situated to balance the many interests that telecommunications policymaking entails.

QUESTION:

2a. Specifically, what role should the NTIA play in setting or enforcing policy in telecommunications trade?

ANSWER:

NTIA has unique expertise in telecommunications policy. We have led telecommunications policy and technical telecommunications discussions with other nations. We have also led discussions to help open foreign markets to U.S. telecommunications products and services. We have supported the International Trade Administration and the U.S. Trade Representative in trade talks. NTIA has developed close working relationships with foreign Post, Telegraph, and Telephone ministries (PTTs) and newly privatized overseas telephone operators through the International Telecommunication Union and other international forums. We shall continue to use these relationships and all available resources to communicate U.S. telecommunications policy issues and to assist in understanding and opening foreign markets to domestic telecommunications products and services.

Congress, through the Omnibus Trade and Competitiveness Act of 1988, has directed the Secretary of Commerce to conduct a study, in consultation with the FCC and USTR, of the competitiveness of the U.S. telecommunications industry and the effects of the policies and practices of other nations on this industry. Telecommunications is the only industrial sector highlighted in the Act for specific treatment due to its national importance. NTIA will complete the required study and submit it in August 1989.

In addition, NTIA has overall Executive Branch policy leadership, and has been particularly active in laying the technical groundwork for U.S. contributions to the ITU via our Institute for Telecommunication Sciences and our spectrum management expertise. In the future, NTIA will be particularly sensitive to the trade implications of the international standards setting process.

Finally, NTIA has taken the lead in working with developing countries, via studies, at their request, of their national infrastructure, and via work with them in developing national spectrum management techniques. These projects are not specifically focused toward trade. But they do create a climate out of which favorable U.S. trade relations do prosper.

QUESTION:

2b. What role should the NTIA play in setting policy for advanced television systems?

ANSWER:

The President has asked Secretary Mosbacher to lead the Administration's efforts in advanced television. The Secretary leads an intergovernmental Economic Policy Council (EPC) working group on advanced television and NTIA has the ability to address major national and international advanced television issues through this forum.

NTIA's principal role in advanced television systems is developing the broad policy options for the Secretary. NTIA is well positioned to balance the many and varied interests that our national approach to advanced television must embrace. Included are those of manufacturers, program providers, broadcasters, potential satellite and terrestrial advanced television transmission providers, and American consumers. NTIA's Institute for Telecommunication Sciences, with its unique spectrum research capabilities, has also been studying the options for over the airways advanced television transmission.

QUESTION:

2c. On what issues do you believe that NTIA, among all the government agencies, should take the lead?

ANSWER:

As the Principal Adviser to the President on telecommunications issues, NTIA has the responsibility to lead development, in coordination with other Government organizations, of Executive Branch telecommunications policy. In areas where issues overlap organizational lines, NTIA has the ability to coordinate the work so that the viewpoints and positions of other agencies are fully addressed.

NTIA also chairs the Interdepartment Radio Advisory Committee (comprised of representatives from 23 government agencies) where NTIA addresses concerns regarding radio spectrum management for the Federal Government; and is a principal participant at the International Telecommunication Union conferences where international telecommunications policy negotiations and standards activities take place.

NTIA is concerned with radio spectrum policy issues as they effect the entire national spectrum and takes a lead in suggesting alternative spectrum allocation procedures and innovative uses of the spectrum.

QUESTION:

3. What changes to the NTIA's status and authority do you believe are necessary, if any, to allow it to function most effectively?

ANSWER:

Executive Order 12046 establishes NTIA's status and authority as the President's Spokesperson on telecommunications issues. The broad authority contained in this order provides NTIA with sufficient authority to function effectively.

QUESTION:

4. How do you propose to improve the functioning of NTIA to allow it to fulfill its functions most efficiently?

ANSWER:

NTIA possesses a highly qualified professional staff; its telecommunications policy expertise cannot be matched anywhere else within the Federal Government. I am committed to maintaining this expertise and ensuring that, as the issues change, NTIA's staff is able to quickly adapt and expand their expertise.

If favorably nominated by the Committee and confirmed by the Senate, I intend to thoroughly review all aspects of the agency to ensure that NTIA functions in an optimal fashion. In fact, I intend to bring a management philosophy of "continuous improvement" to my oversight of the agency. I shall also ensure that the entire staff is motivated by this approach to their work.

As a general statement, NTIA can be most effective when all government agencies involved in telecommunications policy, trade, and coordination strive to work together in an atmosphere of openness and consensus building. I commit that this will be our spirit and mode of operation at NTIA.

QUESTION:

5. How will your former positions at the FCC and at NYNEX influence your perspectives on U.S. telecommunications policy as head of the NTIA?

ANSWER:

Telecommunications is complex field, with a variety of competing perspectives. My experiences at the FCC -- a regulatory agency -- and at NYNEX -- a major Bell Operating Company subject to Federal regulation -- have broadened my perspective and equipped me to weigh the pros and cons of telecommunications policy issues. While at the FCC, my positions afforded me with the opportunity to hear many contrasting views, and to gain insights into the complexity of telecommunications policy issues. The majority of the my experience at the FCC was in non-decisional roles; but the knowledge and perspective that I gained will be a platform for my leadership at NTIA.

My responsibility at NYNEX centered on helping to direct the course of a major U.S. corporation, with little prior international experience, into successful operations in the global environment. This experience in particular has given me an understanding of how large communications companies must approach the international marketplace and how to promote global ideals for U.S. communications industries in general.

In conclusion, while my prior experiences at the FCC and NYNEX have given me important perspectives, I commit to examining each issue that comes before me at NTIA on the merits, with a completely open mind.

QUESTION:

6. You previously served as a Legal Assistant to FCC Chairman Mark Fowler. How would you compare your approach to telecommunications policy to that of former Chairman Fowler?

ANSWER:

The FCC and NTIA operate in different institutional contexts. The FCC has a regulatory approach to all telecommunications issues; NTIA is fulfilling a mandate as the President's Advisor and Executive Branch Spokesperson on telecommunications policy issues.

I bring my own set of strengths. These include my broad experiences in the telecommunications, antitrust and international communications fields, my ability and inclination to pragmatically search for the best way to promote the national interest, and my desire to build consensus among the diverse groups that represent telecommunications interests. I have limited background in the mass media area. I share with FCC Chairman Mark Fowler a dedication to advocate liberalization of international telecommunications policies and openness of international telecommunications markets.

QUESTION:

7. What will be your highest priority policy item for the NTIA?

ANSWER:

NTIA's highest priority policy objective is to promote U.S. competitiveness in telecommunications and the information industry, sectors key to America's leadership in the Information Age. Consistent with the direction of President Bush and Secretary Mosbacher, NTIA will focus on media globalization and the U.S. telecommunications infrastructure as keys to maintaining the U.S. communications industries as world leaders. Global competition is encroaching on our lead in telecommunications and we must work toward an international environment conducive to U.S. competitiveness.

The telecommunications infrastructure of the U.S. is an essential determining factor in whether the U.S. can maintain its leadership role and marketplace share in our Information Age -- just as our highways, bridges, ports and airports provided the key national infrastructure for our competitiveness in the twentieth century.

QUESTION:

8. How do you view the relationship between the NTIA and the Congress?

ANSWER:

In the past NTIA has enjoyed a solid bipartisan relationship with Congress and I view this support as essential in achieving our mission. As a consensus-builder, I plan on strengthening this relationship and continuing to work with Congress to achieve national communications objectives. The working relationship will be forthright, with NTIA's staff drawing upon their telecommunications expertise to be as responsive as possible to Congressional direction.

QUESTION:

9. How do your propose to treat matters that come before you that involve your former employer, NYNEX?

ANSWER:

I have issued a recusal statement that bars my participation, for one year following my appointment, in any particular matter having a direct and predictable effect upon NYNEX specifically. Thus, for example, were a similar situation to arise, I would not participate in any NTIA consideration of a NYNEX request for a waiver of the Modified Final Judgement with respect to a proposal like the one to purchase the PTAT transatlantic cable. Procedures have been established within NTIA and with Department of Commerce's Office of General Counsel to prevent any such occurrence.

The recusal does not extend to matters likely to affect NYNEX only as a member of a broader industry sector. Thus I would not be barred from participating in the development of NTIA positions with respect to, for example, price caps affecting all local exchange carriers or changes to the MFJ affecting all of the Bell Operating Companies.

QUESTION:

10. Are you aware of any other conflicts or potential conflicts of interest and how do you propose to handle such conflicts?

ANSWER:

I have issued a recusal statement that will prevent any conflicts of interest from arising. It has been drafted with the assistance of, and has been specifically approved by, the Office of the General Counsel of the Department of Commerce. Procedures have been established within NTIA and with Commerce's General Counsel to implement that recusal.

The recusal and implementing procedures specifically prevent any conflict of interest or appearance of a conflict between my activities at NTIA and the telecommunications law practice of my husband.

I will not participate in any matter in which my husband's law firm serves as representative or otherwise participates. NTIA's Chief Counsel will monitor all matters before NTIA in which there is a named representative. If my husband or his partners or associates are appearing, the matter will be referred to the Deputy Assistant Secretary and I will be notified that I cannot participate in the matter. In addition, my husband has agreed to advise the Chief Counsel of matters in which he or his firm is submitting pleadings, making appearances or helping to draft documents for submission to NTIA or another agency or court or Congress, if NTIA is likely to have an interest in the matter, so that I can be insulated from such matters. In addition, Department regulations bar me from revealing inside information and I certainly intend to abide by that restriction.

STATEMENT OF JANICE OBUCHOWSKI

Ms. OBUCHOWSKI. Senator Inouye, thank you very much for your gracious introduction. I would also like to recognize my mom, Mrs. Chester Obuchowski, who is with me today.

Senator INOUYE. Where is Mrs. Obuchowski? Please.

Ms. OBUCHOWSKI. As well as my husband, Bert Halprin.

Thank you, Mr. Chairman.

Senator INOUYE. How would you like to be the husband of an assistant secretary?

Mr. HALPRIN. It makes me very proud, Senator. I hope that presages your vote.

Ms. OBUCHOWSKI. Senator Inouye, I will be nominating him for the Dennis Thatcher Club.

Senator Inouye, thank you for this opportunity to appear before you today for the consideration of my nomination to be Assistant Secretary of Commerce for Communications and Information.

I am grateful for the honor which the President and Secretary Mosbacher have conferred upon me. I also want to thank Chairman Hollings and you, Senator Inouye, for your expeditious scheduling of this hearing.

If I am confirmed, I shall do all that I can to ensure that the National Telecommunications and Information Administration continues to work affirmatively with Congress, the Federal Communications Commission, the industry, and the American public, to develop the communications policies that are needed to best serve our country.

We face many challenges. In the common carrier field we need to ensure that American industry is able to compete effectively both at home and overseas. Communications is key to national competitiveness, as well as to the delivery of a growing range of government, educational, social, and entertainment services.

We need to forge a strong, bipartisan consensus regarding the future development of our domestic and international communications infrastructure to meet these goals.

In the mass media area, global markets are developing. We must ensure that our broadcast, cable television, and program production policies reflect this fact.

NTIA will also continue to focus on the key issue of high-definition television and the role U.S. industry will play in this emerging, worldwide high-technology sector. And there is also the issue of noncommercial public broadcasting and its future role to address.

NTIA has important responsibilities, ranging from its management of the Federal Government's own use of the radio spectrum, to working with the FCC and the State Department on international communication satellite issues.

In addition, NTIA's Institute for Telecommunication Sciences not only provides expert technical assistance in support of our policy initiatives, but also plays a major role in U.S. communication standards development.

If I am favorably recommended by this Committee and confirmed by the Senate, I commit to applying my best efforts to make sure that NTIA fulfills all of its responsibilities efficiently, effectively and, I hope, creatively.

I also look forward to working constructively with the Committee and its expert staff.

Thank you very much. I would be happy to answer any questions you may have at this time.

Senator **Inouye**. I thank you very much, Ms. Obuchowski. Let the record show that we have received all the appropriate papers, financial and security and otherwise. They have been filed in order and we see nothing wrong.

Ms. Obuchowski, I wish to submit to you several questions for your concern and consideration, but we have just one question here we would like to ask in public. Will your service with NYNEX affect your work in NTIA? Do you foresee any conflicts of interest?

Ms. **Obuchowski**. Senator, thank you very much. I have considered potential problems of conflict of interest and have worked with the General Counsel of the Department of Commerce, with the White House, and with the Office of Government Ethics, to prepare the appropriate recusals to address those issues.

In addition, as I am sure, Senators, you are aware, I have severed all ties with NYNEX, including financial interests in any pensions or stock. I intend to approach my responsibilities dispassionately. And I am certainly intent on doing so, sir.

Senator **Inouye**. I believe your husband is a member of a law firm with telecommunications clients. Have you worked out an arrangement to prevent conflicts?

Ms. **Obuchowski**. Senator Inouye, my husband is a telecommunications and communications partner in a law firm. I have never been practicing with him there. Yes, indeed, we have, again, looked very carefully at all the potentials for conflict of interest or appearances of same, and have worked out, I believe, a careful recusal in that regard, as well as the appropriate implementing procedures to ensure that should issues arise, they not even be brought to my attention. And all the staff of the Department of Commerce is duly informed of these procedures.

Thank you, sir.

Senator **Inouye**. Senator Pressler.

Senator **Pressler**. Thank you very much. I am very pleased to support this nominee. I do want to ask about the role that NTIA plays in telecommunications policymaking from a public administration point of view. I know in your answer you said that NTIA is the President's principal spokesperson on telecommunications and information policy.

How can an assistant secretary of Commerce be the President's principal spokesman on telecommunications and information policy?

Ms. **Obuchowski**. Thank you, Senator Pressler.

As you know in this country, the overall responsibility for regulation of telecommunications resides with the Federal Communications Commission. When it comes to Executive branch policy, NTIA has as its genesis the Office of Telecommunications Policy in the White House. And at the point at which that office became, I think, sufficiently cumbersome that it could not reside in the White House, it was basically spun out into the Department of

Commerce, where it became NTIA. And those responsibilities have remained with my position and NTIA, sir.

Senator **Pressler**. All right. In addition to being a spokesperson, what role will you play in policymaking?

Ms. **Obuchowski**. Senator, we will work very hard to be responsive to your interests, obviously. We will be following the initiatives of the Congress, and we will seek to provide expert advice directly and with the NTIA staff. And also we will be weighing in on behalf of the Administration.

Senator **Pressler**. Thank you very much, Mr. Chairman.

Senator **Inouye**. Okay, thank you.

Before I call for a vote—we have two senators now—I note the presence of a very distinguished member of the Federal Communications Commission, Commissioner James Quello. And I have been advised that Commissioner Quello would like to say a few nice words about you.

Ms. **Obuchowski**. Thank you, sir.

Mr. **Quello**. Thank you for this opportunity, Senator. I just want people to know that we worked with Ms. Obuchowski at the FCC for a long time. She was very open-minded, friendly, knowledgeable, and I do not attend other people's confirmations very often, but my entire staff is here to support her appointment.

Thank you for this opportunity.

Senator **Inouye**. You just got the stamp of approval.

Ms. **Obuchowski**. Thank you. And I will try very, very hard to live up to that wonderful expression of faith in me.

Senator **Inouye**. We have not received any objections. Without objection, your nomination will be reported favorably to the full committee. And I have been advised that, on or before the 1st of August, it will be voted upon by the full committee and reported to the Senate.

Congratulations, ma'am.

Ms. **Obuchowski**. Thank you very much, Mr. Chairman and Senator Pressler. I very much appreciate this hearing.

Senator **Inouye**. Thank you very much.

[Whereupon, at 9:15 a.m., the hearing was adjourned.]

[The following information was subsequently received for the record:]

JANICE OBUCHOWSKI NOMINATION

POST-HEARING QUESTIONS

QUESTION:

Ms. Obuchowski, in your response to the pre-hearing questions concerning conflicts of interest, you state that you will recuse yourself from all matters "having a direct and predictable affect on NYNEX specifically" but you would not recuse yourself from matters that will affect NYNEX as a member of the telephone industry. Let me ask you to elaborate on this response. Could you give some examples of matters which you would and would not recuse yourself?

ANSWER:

As I noted in my prior response to the Congress, procedures have been established within NTIA and with the Department of Commerce's Office of General Counsel to prevent the occurrence of any conflict of interest or appearance of conflict. With respect to matters affecting NYNEX, I cited as examples of matters with which I would not become involved for one year any NTIA consideration of NYNEX requests for support of its waivers of the Modified Final Judgment, such as NTIA's consideration of a NYNEX proposal to purchase the PTAT transatlantic cable. Nor, as a further example, would I be involved in any NTIA review of NYNEX's own tariff proposals before the FCC, or any possible NYNEX-specific spectrum licensing questions before the FCC or NTIA.

As you stated, the recusal does not extend to matters likely to affect NYNEX only as a member of a broader industry sector. Thus, I would participate in, for example, the Commission's Computer III or open network architecture (ONA) proceedings applicable to many carriers, and in any legislative or other proceedings involving changes to the MFJ affecting all of the Bell Operating Companies.

QUESTION:

Have you ascertained how many pending matters you will have to recuse yourself from due to conflicts with NYNEX and your husband's law practice?

ANSWER:

Of course the review process to assure that no conflicts of interest develop will be an ongoing one. At this point I have identified two issues from which I will recuse myself upon confirmation. The first involves an application before the FCC by Orbital Sciences Corporation for a communications satellite called Datasat. Though filed with the FCC, this matter is likely to be coordinated with NTIA and the Interdepartment Radio Advisory Committee (IRAC). I will not be involved in this matter in any way. The second matter deals with a Petition for Rulemaking filed with the FCC by PTAT, the entity involved in the construction of a transatlantic fiber optic cable. My husband was involved as counsel ~~in that~~ Petition for Rulemaking. I have determined not to be involved in any way in this rulemaking as well.

QUESTION:

Ms. Obuchowski, for the past few years, the FCC and NTIA have promoted the auction of non-mass media radio spectrum both as a method of reducing the federal deficit and as a better way to award licenses. What are your views on the auction plan?

ANSWER:

The radio spectrum constitutes an important and valuable national resource. Its efficient and effective use is equally important. NTIA is studying a number of proposals concerning spectrum management, including auctions as an allocation measure. I have yet to come to a definitive personal conclusion on the optimal way to award licenses or on the question whether some spectrum bands are more conducive to allocation by auctions than others.

The President's recommendations for initiatives to be included in the 1990 budget include a plan to transfer certain assets to the private sector, including a spectrum auction proposal.

QUESTION:

Do you think auctions should apply across the board to all spectrum users?

ANSWER:

Spectrum auctions have been proposed in the past for frequencies that would be used for mobile radio service. The use of this measure in other services has not been formally proposed. Until an NTIA review of spectrum management has been completed and I have had the benefit of advice from a broad range of spectrum users, I would not reach conclusions about the expansion of previous proposals.

QUESTION:

Geographic toll rate averaging as a universal service mechanism is very important to telephone companies in sparsely populated rural areas. What is your position on geographic toll averaging?

ANSWER:

Ensuring universal service is a fundamental component of U.S. telecommunications policy. Geographic toll averaging has been regarded as an integral part of the mechanisms used to promote universal service and NTIA has been generally supportive of it. As specific issues might arise concerning application of the principle of geographic toll averaging, I will study them carefully with an eye towards promoting continued universal service especially to sparsely populated rural areas.

QUESTION:

Ms. Obuchowski, in your responses to the pre-hearing questions, you state that you shared Mark Fowler's "dedication to liberalization of international telecommunications policies..." Do you also share his view that broadcast stations should be treated like toasters and that the only broadcast regulations should be in the area of spectrum allocation and technical rules?

ANSWER:

Broadcasting is a major source of news, information, and entertainment which is valued highly by the American public. Government policy should recognize this reality. Particularly important is ensuring the continued ability of broadcasting to compete in our evolving global media markets. NTIA will be reviewing current policies with a view toward that goal.

My own experience does not give me sufficient knowledge or judgment at this point to fully delineate the optimal bounds of broadcast regulation. I await the opportunity to learn from the Congress, the Administration, broadcast industry participants and consumer representatives before formulating a personal philosophy on broadcast oversight.

QUESTION:

For the past eight years the Administration has not recommended any funds for the Public Telecommunications Facilities Program which provides equipment grants to public broadcast stations. Do you believe that this program should continue to be funded?

ANSWER:

The Public Telecommunications Facilities Program (PTFP) was established in 1963 to extend the coverage of public radio and television signals to unserved areas. Since then, PTFP has contributed to bringing public broadcasting services to approximately 96.5% of the population (94% receives television coverage and 86% receives radio broadcasts). The program's basic goal has thus been accomplished and, given Federal deficits, the Administration may not recommend continued PTFP funding.

QUESTION:

Do you support reinstatement of some form of the must-carry rules?

ANSWER:

The must-carry issue implicates a number of complex issues including the free speech rights of cable operators (as defined by the courts), the compensation of programmers, and the obligation of television broadcasters to provide local service. The FCC's most recent rules in this area were not upheld by the courts. This is an area which NTIA will be reviewing further to determine what measures are appropriate and feasible, given court rulings.

QUESTION:

Some people believe that the United States is falling behind Europe in the development of new technologies and services, particularly in the field of mobile communications, in part because of inadequate frequency allocations. Do you intend to initiate a comprehensive review of U.S. frequency allocation policies?

ANSWER:

Telecommunications in general, and radiocommunication in particular, benefit domestic and worldwide commerce by promoting the efficient flow and management of information. In addition, given the global nature and size of telecommunications markets, it is increasingly important to the U.S. economy to compete effectively in these markets. Development of technologies and services that provide for efficient use and management of radio spectrum is thus a key component of our ability to compete globally.

How the Government manages both private sector and Federal use of the radio spectrum affects the performance of U.S. industries including land mobile radio. NTIA will review Federal radio spectrum management and will also assess existing commercial allocation practices with this in mind. NTIA is aware of considerable Congressional interest in this subject and looks forward to a dialogue on it.

QUESTION:

Within the Intelsat structure, Comsat has several different functions: it is the single largest owner of Intelsat; and it serves as the representative of U.S. interests on Intelsat's Board of Governors. Are you concerned about the conflicts posed by Comsat's various roles? If so, do you have any suggestions for eliminating, or at least minimizing, these conflicts?

ANSWER:

The various roles of Comsat within the INTELSAT organization could lead to a real or perceived conflict of interest. Specifically, Comsat may find that certain U.S. policies which it must represent at meetings of the INTELSAT Board of Governors are contrary to its business interests.

Comsat's potential conflicts of interest are addressed by the existing oversight process, known as the "instructional process". Under this process NTIA, in coordination with the FCC and the State Department, develops positions for Comsat to take on issues before the Board of Governors that are of concern to the U.S. These positions are presented to Comsat in the form of instructions and Government representatives monitor Comsat's implementation of the instructions during Board meetings. NTIA continues to oversee the current process to ensure that it adequately serves the public interest. At present NTIA has no specific further suggestions.

NTIA looks forward to insights from the Congress in this regard.

QUESTION:

Ms. Obuchowski, what is the status of the PEACESAT program? How long will it take to acquire the necessary satellite capacity to replace the existing satellite?

ANSWER:

The prospects for the PEACESAT program are good. NTIA currently is discussing with NASA and NOAA the use of a suitable GOES Satellite to provide for the interim service into the early 1990s. A Memorandum of Understanding covering frequency use, satellite relocation, tracking telemetry and control and ongoing satellite operations is being developed. Physical movement of the GOES satellite to the necessary coordinates is anticipated to be completed prior to year end. The University of Hawaii is working with vendors to finalize acquisition of earth terminals, delivery of which is scheduled to begin in December.

Concurrently, NTIA is proceeding with the appropriate international notification and coordination required for the project. NTIA also is reviewing proposals, submitted in response to a Request for Information, which address the long-term needs of PEACESAT.

QUESTION:

What are your views of the National Telecommunications and Information Administration proposal to permit telephone companies to provide common carrier services for delivery of video programming to private homes?

ANSWER:

NTIA's 1988 study of video program distribution and cable television presented recommendations that were designed to increase competition in the video services market and ensure diversity in viewer choice. The Department continues to support vibrant, growing, and competitive markets in broadcasting, cable TV, and telephone services. I have not completed my consideration of the 1988 NTIA study of video program distribution and cable television.

QUESTION:

What impact will this proposal have on ratepayers?

ANSWER:

NTIA's 1988 study and resulting policy recommendations took into account issues such as incentives to cross-subsidize; the development of new nonvideo broadband services; and access and rates. Given subsequent developments, further empirical information and data may be needed to ensure that the legitimate interests of all parties, especially the public, are taken fully into account. For instance, NTIA will continue to monitor implementation of cost allocation manuals approved by the FCC to ascertain how effective they are in fairly allocating costs among services. In addition, NTIA is aware that introduction of some new network services actually drive down overall network costs to consumers; others may not.

QUESTION:

How much consideration has been given to how regulation can be used to prevent ratepayers from having to absorb the costs of paying for telephone companies' entry into cable?

ANSWER:

The cost to ratepayers of telephone company entry into video markets is part of the continuing policy debates in this area. This is an issue of great importance to ratepayers, to which NTIA has devoted substantial attention in the past and which it shall pursue in the future. As noted, there are several dimensions to this issue, including possible cross-subsidization, fair and affordable access, reasonable rates, and the development of new and innovative services. In formulating policy recommendations on this topic, the Department will seek to carefully consider all sides of this issue.

NTIA also intends to actively analyze ONA developments, to ensure that ONA's implementation promotes the interests of basic service ratepayers.

QUESTION:

What are your views about removing the various restrictions on Bell Operating Companies contained in the modified final judgement?

ANSWER:

The Department has advocated changing restrictions on the Bell companies under the AT&T Consent Decree. Consistent with the goal of promoting U.S. competitiveness in telecommunications and the information industry, NTIA will work within the Administration and with Congress to develop sound solutions to the issues raised by the decree and other restrictions.

QUESTION:

If any should be removed, what would they be? Information services? Manufacturing?

ANSWER:

The Administration is reviewing proposals to change the AT&T consent decree restrictions. No determination has been reached regarding what changes are most important, or how they should be pursued.

QUESTION:

What are the competitive implications of RBOCs being able to provide information services?

ANSWER:

Bell company provision of information services has the potential to expand customer options, and could also affect demand for terminal equipment. Possible anticompetitive conduct is also an issue, although regulatory safeguards may greatly alleviate concerns. Public policy goals include ensuring that services are available, particularly to residential and small business customers, and fostering more effective competition.

NOMINATIONS—JULY

TUESDAY, JULY 18, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 2:52 p.m., in room SR-253, Russell Senate Office Building, Hon. John D. Rockefeller IV presiding.

Staff members assigned to this hearing: Sally Sussman and Becky Kojm, professional staff members; Ruth Johnson and Gerri Hall, minority professional staff members.

OPENING STATEMENT BY SENATOR ROCKEFELLER

Senator ROCKEFELLER. The American industrial landscape fundamentally was a smokestack one, and that had to do with assembly lines. That is the way people understood our country to be.

Today, a lot of the leading American industries are high technology and services, and those are somewhat more difficult to visualize when people think of what industry is.

I think the tourism industry is an example of that. It is not a visible one. It does not belch smoke. It does not have the sort of muscular shape to it that a giant steel factory might or an enormous distribution center might have. But it does have, as others have said here, a profound impact on our economy.

It is a giant. It is the second largest service industry in the country. That is a potent fact.

It makes up over 6 percent of our Gross National Product, and nearly 6 million people count their jobs within tourism.

It is our major success story, in terms of exports. It was our largest export in 1988. That fact, I think, is known by virtually none in this country, and it is a powerful, powerful fact.

The tourism industry posted a $4.5 billion surplus in terms of trade exports with Japan last year. A lot of businesses would like to be able to say that. A record 30 million foreigners travelled to this country in 1988. They spent $37 billion during their stay. Each one of these visitors is an individual export. It is just as though we were exporting a car, an automobile, overseas. Each of those is precious and important to us.

The States are tremendously aware of the impact of tourism. The National Governors Association is meeting later this month to adopt a new tourism policy within its own constitution, so to speak. They have not ironed out all of the details. But one thing we know, and I know, having been a governor for eight years, is tourism is something governors look to very heavily.

In West Virginia, obviously it is crucial to us. We have our economic problems. Over the last several years, tourism has grown 27 percent as an industry, and it is now over the $1.6 billion mark, which is, in fact, approximately the size of our State budget.

So, skeptics may ask at their own peril, as far as I am concerned, if the tourism industry is booming so much as I indicate it is, why is it, then, that we need somebody as qualified as Ambassador Schnabel to be at its helm?

I think part of the answer to that is, unlike some industries, where competition is amongst industries, as between industries, here we are talking about competing head-to-head with foreign governments.

In this matter, we are losing world market share in tourism. We need our government to be doing the kind of international marketing that makes it possible for us to advertise the United States as the destination that it ought to be.

Our government ranks 45th in per capita spending among international communities. We are surpassed by countries like Iceland, Kenya, Thailand, and Chile.

I understand the budgetary constraints. We all do. But we do need to get the most that we can out of the dollars that we do spend on USTTA. I think, Mr. Ambassador, that you are precisely the right person and have precisely the right background to help us do that.

I intend to strongly support your nomination. It would almost be inevitable with somebody who is called "Rock" that I would do so.

But I have much deeper reasons for that, and I think that you have a very strong sense of the world. You are experienced in business. You are an excellent hands-on manager. And you have been prevailed upon by what I think is a first rate Secretary of Commerce to relinquish your position as Ambassador to Finland and come and take this position.

That was not an easy decision for you. You had many choices before you, and the fact that you have decided to do this I think speaks very well for your determination.

I will have some questions that I want to ask you, but it is now my honor to call upon Senator Burns.

Mr. Ambassador, I should point out to you that Members of the Tourism Subcommittee are people of such extraordinary judgment that, when it comes to a trial, they are all summoned to be a part of that trial. Fortunately, it is not their own trial. It is about a judge, a Federal judge. Both Senator Burns and Senator Bryan are participating in this trial. I thank my lucky stars that it is them and not me who are doing that. But they have to do it from 9:00 to 5:00 every day, for weeks—months. It's a terrible ordeal.

So I want to call on the Ranking Member of this Subcommittee, Senator Burns, of the State of Montana, to make an opening statement if he so wishes.

OPENING STATEMENT BY SENATOR BURNS

Senator BURNS. Thank you, Mr. Chairman. I appreciate that. But I hope it does not take months, and I don't think Senator Bryan would like that, either.

I guess it is one of those jobs that you get in the Senate and it has to be done.

It is with a great deal of pleasure today that I submit my endorsement of Ambassador Rockwell Schnabel to be Under Secretary of Commerce for Travel and Tourism.

We met last week in an environment that was not really conducive to the subject at hand. Nonetheless, we discussed a few things that I have on my mind, and I was quite impressed with the Ambassador. He is well qualified for this important position.

His responsibilities will not only include the watchdogging of the travel and tourism industry here in the United States, its trends and policies, but the actual enactment of highly important legislation that will affect my home State of Montana. I look forward to working with the Ambassador to help increase the quality of tourism service to Montana, as well as to other States, like the Old West Trail Association of Nebraska, North Dakota, South Dakota, and Wyoming.

These States together hosted over 1.5 million visitors this past year, over the historical footsteps of Lewis and Clark. Tourism is Montana's number two industry, ranking just behind agriculture. We have a vast amount of scenic forestland and wildlife, as well as Western history and culture, to offer the family traveler and adventurers of all ages.

However, we face a few obstacles in our quest to increase the number of visitors to our great State and our area each year. One of these is the need to increase air transportation into our part of the country.

We will be calling on the Ambassador for his consideration and cooperation many times in this great effort. I look forward with a great deal of pleasure to working with him in his new position.

I welcome you, sir.

Senator ROCKEFELLER. Thank you, Senator.

Senator Bryan.

OPENING STATEMENT BY SENATOR BRYAN

Senator BRYAN. Thank you very much, Mr. Chairman.

I first would congratulate you on the leadership that you have shown as the Chairman of our Subcommittee and to indicate to you and other Members of the Committee that I had the pleasure yesterday of visiting with Ambassador Schnabel. I believe that he brings the kind of leadership that we are going to need to be aggressive in promoting more international travel to the United States.

We meet at a very propitious time, in the sense that there is a tremendous potential, particularly in the Pacific Rim for those of us who are from the West.

In my own State, unlike Senator Burns, tourism is the number one industry. Nevada is more dependent upon tourism than any other State. So the kind of opportunities that present themselves to Nevada are of interest and concern throughout this country.

Of the 50 States, 40 States include tourism as either the number one, number two, or number three industry. So it is not just a parochial point of view that I express. It is a national perspective as well.

I look forward to working with you, to fully cooperating, to see if we can't do a little more to get a little bit more muscle into the USTTA budget. I realize that those matters that we talked about yesterday are not solely within your control. But aggressive leadership can be the hallmark of an enormous success, and your track record, Mr. Ambassador, indicates that you are capable of doing that.

I want to say, just as one Senator who serves on this Subcommittee, that I am pledged to fully work with you and to cooperate with you and your staff because there is a job that can be done, not only in terms of what it means economically to Nevada, but what it means to the Nation, in terms of our trade imbalances, as Senator Wilson and others have pointed out.

We look forward to working with you.

Thank you.

Senator **Rockefeller**. Thank you very much, Senator Bryan and Senator Burns.

It is not that we never stop talking, Mr. Ambassador, but we have our statements to make and we feel strongly about them. Your time will come, I promise you.

It is now my honor to call upon Senator Lott.

OPENING STATEMENT BY SENATOR LOTT

Senator **Lott**. Thank you.

Mr. Chairman, I can do little other than add to what has already been said about the importance, the emphasis, that needs to be placed on United States travel and tourism.

I would also congratulate you, Mr. Ambassador, for your selection to this position, a position that I think can be a very important one, and one that a lot more can be done with than has been done in the past.

Without criticizing your predecessors, there have been certain restraints within the department and within administrations, and maybe the time just has not been right. But I think the time now is ripe for you to take this position, with your background, and do a great deal with it in the future.

So I certainly support your nomination. I am very pleased that a man of your stature and calibre was selected for it, and I look forward to working with you in the years ahead in this position.

Unlike some of my colleagues, apparently, I am going to throw a couple of questions to you and give you a chance to be heard.

Senator **Rockefeller**. Excuse me, Senator Lott, I don't wish to interrupt you, but one of our problems is the Ambassador has not yet had a chance to say anything. His statement is short, but I really would like to give him a chance to give his statement before we question him.

Senator **Lott**. Oh, you have not done your statement yet?

Senator **Rockefeller**. He has not.

Senator **Lott**. I have already read the statement. I have already factored it in, and am ready to go.

Senator **Rockefeller**. I have, too, but he has not given it publicly. That is called "part of the system."

Senator **Lott**. Then I would be happy to wait.

Senator ROCKEFELLER. I will call upon you immediately at the conclusion of his statement.

Senator LOTT. Great. I will quit at this point because I would like to get his statement on the record, and I do have a couple of questions, Mr. Chairman.

Senator ROCKEFELLER. Good.

Senator Wilson.

STATEMENT OF HON. PETE WILSON, U.S. SENATOR FROM CALIFORNIA

Senator WILSON. Mr. Chairman, it is a distinct pleasure for me to appear before the Senate Commerce Committee to introduce my good friend, Rock Schnabel.

The administration has recommended Mr. Schnabel for the position of Under Secretary for Travel and Tourism at the Department of Commerce, and it is my pleasure to wholeheartedly support that nomination and to offer the strongest possible recommendation.

It is easy for me to do so, apart from the personal friendship that I enjoy with Mr. Schnabel. He will bring to this position, when confirmed, a remarkable background and a great energy, a great knowledge of the world, and a full appreciation of why it is necessary for the United States to maximize our potential as a visitor destination for foreign visitors in conjunction with the convention and visitor industry that we entertain domestically.

Most recently, Ambassador Schnabel—to give him the title that he has earned—served as the United States Ambassador to Finland, holding that post from December, 1985, until February of 1989.

Prior to that assignment, Rock Schnabel spent many years as an investment banker. He held senior management positions with distinguished American and European investment banking firms. In addition, Ambassador Schnabel has held a number of corporate directorships in both the United States and with European companies.

Without going into his background, because I know you are familiar with it—the Committee has been provided it, and I know the Chairman, with his characteristic diligence, is fully familiar with the background—I'll just say that it obviously speaks eloquently for itself and states that he is, by experience, well qualified for this position.

As a Member of the Senate Tourism Caucus, along with the Chairman and other distinguished Members of this Committee, I am mindful of the enormous importance to the United States economy of this industry.

The tourism industry generated over $270 billion in sales last year, accounting for 6.4 percent of our Gross National Product.

In terms of gross sales, it is the third largest service industry in the United States, with industries comprising the tourism trade including not only the obvious hotels, motels, and airlines, but all of the restaurants, the attractions, the tour operators, the bus companies, and the retail outlets which are the indirect beneficiaries of the presence of visitors to this country and to different destinations, in terms of domestic tourism.

The diversity in services has resulted in tourism becoming the United States' second largest largest private employer, providing 5.2 million jobs directly and 2.2 million indirectly. I happen to think that is a conservative estimate.

My home State of California derives significant economic employment and cultural gain from the tourism industry. In 1987, over 111 million travellers from all corners of the globe visited our multi-dimensional State. Last year, the travel and tourism industry employed almost 570,000 Californians. It generated $37 billion in expenditures and furnished State and local coffers with $1.8 billion in tax revenues.

So, clearly, the role that tourism plays in California and in the United States economies is difficult to overstate.

The United States Travel and Tourism Administration is working to establish joint ventures between the tourism industry and the Federal Government to promote foreign tourism in the United States. International travel services are exports and, having generated $37.1 billion in export revenue in 1987, they rank as the largest U.S. services export.

This revenue has a direct, positive impact on our balance of trade with our trading partners. Because of the importance of the industry, because of that very important impact on the balance of trade, because of its significance as an employer, it is with particular pleasure and enthusiasm that I warmly recommend that this Committee, at the earliest opportunity, recommend confirmation to the appointment of Ambassador Schnabel to this very important post.

I strongly believe that he is the man for the job. With that, I will thank the Chairman and the Members of the Committee for their attention.

I know that you will be much more interested in questioning the candidate than in hearing me elaborate further on his virtues. I think you will be impressed by the exchange that you will have with him.

Thank you very much, Mr. Chairman.

Senator ROCKEFELLER. Senator Wilson, thank you very much.

Senator WILSON. Mr. Chairman, as much as I would enjoy staying and listening to the questions and answers, and being educated by them, I am required to be elsewhere.

But I wonder if I might have the indulgence of the Committee before I leave to have the pleasure of introducing Mrs. Schnabel, who is present in the audience. I would ask that she stand.

Senator ROCKEFELLER. Marna, we welcome you.

Senator WILSON. Mr. Chairman, if I might be excused, I will leave the candidate to his own competent devices. He is more than competent, and I do have to be elsewhere.

Thank you very much, Mr. Chairman.

Senator ROCKEFELLER. Facing this vicious Committee, you leave our witness in perilous hands, Senator.

Thanks very much, Pete. You are terrific to come back and we appreciate it a lot.

Senator WILSON. Thank you.

[The biographical sketch and questions and answers follow:]

ERNEST F. HOLLINGS, SOUTH CAROLINA, CHAIRMAN

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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Schnabel (Last) Rockwell (First) Anthony (Other)

Address: 1410 34th St., N.W. (Current residence)
Washington, D.C. 20007

Department of Commerce
(Consultant to U.S.T.T.A.)
(Business)
HCHB - 14th St. & Constitution Ave.
Washington, D.C. 20230

2. Position to which nominated: Under Secretary of Commerce for Travel and Tourism

Date of nomination: June 6, 1989

3. Date of birth: December (month) 30 (day) 1936 (year)

Place of birth: Amsterdam, The Netherlands

4. Marital status: Married

Full name of Spouse: Marna Belle Del Mar Schnabel

5. Names and ages of children:
Mary Darrin Schnabel (24)
Christy Ann Schnabel (21)
Everton Anthony Schnabel (19)

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Trinity College	1952-56		

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of employer	Address	Type of work
2/86	2/89	U.S. Dept. of State	American Embassy Helsinki, Finland	Ambassador
1/83	2/86	Morgan, Olmstead, Kennedy & Gardner, Inc.	Los Angeles, Ca.	Deputy Chairman; Investment Banki
12/65	1/83	Bateman Eichler, Hill Richards, Inc.	Los Angeles, Ca.	Investment Banki
9/59	12/65	Quincy Cass Assoc.	Los Angeles, Ca.	Investment Banki
6/59	9/59	Air National Guard (Basic Training)	San Antonio, Tx.	Basic Training
1/59	6/59	Microfilm Business Sys.	Los Angeles, Ca.	Trainee

CONTINUED UNDER SECTION H (REMARKS)

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

1.) 3/89 to Present: Consultant to the Dept. of Commerce

2.) 2/86 - 3/89: U.S. Ambassador to the Republic of Finland

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

Memberships: Team 100; The Presidential Trust; Fund for America's Future; Citizens For America

I have served on dinner committees for Presidents Reagan, Nixon and Ford, for Senator Pete Wilson and for Congressman Barry Goldwater, Jr. I also served on both the finance committee and dinner committee for California Lt. Governor Michael Curb.

A separate listing of political contributions is attached.

ATTACHMENT TO: STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEE

Submitted By: Ambassador Rockwell A. Schnabel

Question #9: Political Affiliations & Activities

Financial contributions made by Ambassador Rockwell A. Schnabel over the past ten years are as follows:

Date	Amount	Recipient
06/17/80	$ 2,500.00	Republican Party Unity Dinner
09/16/80	1,000.00	Barry Goldwater, Jr.
10/14/80	1,000.00	California Rrepublican Victory Fund
11/16/81	1,000.00	Drier for Congress
05/19/82	5,000.00	Mike Curb Committee
06/14/82	1,000.00	Pete McClosky for Senate
06/17/82	10,000.00	California Republican Party
07/09/82	1,000.00	Democratic National Committee
11/01/82	1,000.00	Committee for Assemblyman Goggin
04/13/83	1,000.00	California Republican Party
06/27/83	1,000.00	California Republican Party
08/10/84	1,000.00	Californians for Senator Pete Wilson
10/17/84	5,000.00	Victory '84
10/19/84	2,000.00	Victory '84
01/14/85	1,000.00	Republicans Abroad
04/19/85	1,000.00	Art Laffer for U.S. Senate Exploratory Cttee.
04/01/86	1,000.00	George Wolverton for Congress
05/11/86	12.50	Republican Trunkline
05/11/86	50.00	Republican Party - City of Los Angeles
08/20/86	2,000.00	Ed Zschau for Senate
09/10/86	750.00	Bush Campaign
09/26/86	2,000.00	California Rep. Party for California Candidate
10/26/86	198.00	Gloria Stout Assembly
01/27/87	5,000.00	Fund for America's Future
03/05/87	500.00	Bush Campaign
05/22/87	2,500.00	Friends of Tom Bradley
09/01/87	5,000.00	Campaign America
09/01/87	500.00	Kemp for President
10/31/87	1,000.00	Dole for President
01/06/88	1,000.00	Kemp for President
03/05/88	50.00	Campaign Reform Committee
03/15/88	10,000.00	Fund for America's Future
04/26/88	500.00	Bradley for Mayor
05/31/88	10,000.00	Presidential Trust
06/14/88	10.00	Citizens for Common Sense
10/05/88	50,000.00	California Republican Party
10/10/88	500.00	Committee to Elect Curt Pringle
12/10/88	5,090.00	Republican National Committee

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

CURRENT MEMBERSHIPS:

Council of American Ambassadors
Pepperdine Associates
The California Club
L.A. World Affairs Council
Kappa Beta Phi
The Beach Club (Los Angeles)
The Regency Club (Los Angeles)

FORMER MEMBERSHIPS:

Citizens For America (co-chair of Finance Committee)
Boards of Trustees - Los Angeles Ballet, Crossroads School, John Thomas Dye School
Citizens Advisory Committee of the Los Angeles Olympic Committee (also served as both Envoy and Attache to The Netherlands Olympic Team during the 1984 Olympic Games)

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

2/89: The Grand Cross of the Order of the Lion in Finland, awarded by the President of Finland

1985: Medal of Honor given by the Netherlands Olympic Committee and the Gold Medal awarded by the Dutch government; both given for work as the Envoy & Attache to the Dutch Olympic Team in 1984

1981: Commander of the Order of Good Hope, given by the South African government

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

None

Questions Provided by the Committee

United States Travel and Tourism Administration

Question: If confirmed, what are your goals for USTTA?

Answer: My goal will be to execute the agency's mandate under the National Tourism Policy Act. That mandate is to work with the American travel industry to stimulate U.S. export earnings through international trade in tourism.

Question: The Washington Post printed a story calling the position of Under Secretary of Commerce for Travel and Tourism a "sugar plum". If confirmed, what would you do to counteract the impression that the USTTA and its Under Secretary deal with non-substantive or unimportant matters?

Answer: Continuous, aggressive efforts must be undertaken to improve awareness of USTTA's role in behalf of the travel industry and the contribution that industry makes to both the United States and the world's economies.

Tourism is a $2 trillion dollar industry world-wide. Domestically it generates over $300 billion in economic activity. It is America's second largest retail industry, supporting over 6 million jobs, producing more than $37 billion in local, state and federal taxes. USTTA's role is to advocate through trade policy and trade development initiatives the interests of this incredibly important industry. These are not "sugar plum" matters.

If confirmed, I will aggressively pursue all trade development, trade policy and domestic economic development opportunities within the resource limitations of the agency to ensure that the American travel industry's needs are properly understood and properly addressed.

Question: Every year we fight the same battle. The Administration tries to eliminate or curtail the United States Travel and Tourism Administration. Do you think the Administration will support USTTA with general revenue funding this year?

Answer: The Administration is committed to working with Congress and the industry to obtain funding for the agency at a level commensurate with its program needs. To fulfill this committment, however, it must be understood that because of the budget deficit the problem of USTTA funding cannot simply be addressed by adding another $15 or $30 million to the demands already placed on general revenue funding. The Administration wishes to have that funding derived from a facilitation fee, and a proposal will be sent to the Congress later this year. With that proposal on the table, the Administration hopes to be able to negotiate a consensus between industry and the Congress over funding for the agency.

Question: The Administration has frequently proposed user fees as a method for funding USTTA. The rational for user fees has typically been that users reimburse the government for a special service. Do you believe the services provided by USTTA constitute a special service to any particular group? If so, who are the particular beneficiaries?

Answer: There are several groups who benefit from USTTA's activities. There are the broad range of travel industry sectors including the airlines who benefit from the agency's activities, as well as the millions of consumers, both foreign and domestic. The issue in targeting USTTA's facilitation fee is what is the most efficient manner to raise and collect the fee, and which group benefits most from the agency's activities? In recent years it has been the Administration's view that the airlines were both the group from which the fee could be most efficiently collected and that they were a significant beneficiary of the agency's activities.

Tourism Policy

Question: Do you believe the current marketing plan that USTTA operates under is useful? Does the marketing plan emphasize those countries which have the greatest potential impact on the tourism trade deficit?

Answer: USTTA's 1989 marketing plan was prepared by the previous Under Secretary, and while it is currently being used as the overview document for the agency's program, I have not had the opportunity to evaluate it in terms of the priorities I may establish for the agency.

Generally speaking, however, USTTA's trade development strategy is directed toward those 25 world markets which make up more than 85 percent of this nation's international travel export receipts. These countries are also the same nations from which virtually every other nation of the world seeks a share of the international travel trade.

Question: What specific work does the U.S. & Foreign Commercial Service do for USTTA in the eight countries specified in the March 1989 tourism marketing plan?

Answer: USTTA works closely with the US & FCS in the execution of tourism trade development programs in 16 secondary markets around the world. In these markets, US & FCS is carrying out a broad range of programs including travel trade shows, video catalogue programs, Visit USA seminars, the organization of journalist and travel agent familiarization tours, and the operation of Visit USA Information Centers.

In each of these markets the US & FCS officer oversees a Visit USA Committee comprised of the marketing representatives of major travel industry companies including American hotel, car rental and airline companies and foreign flag carriers. Without the cooperation and support of the US & FCS, USTTA would not be able to reach as many markets as effectively as it does.

Question: Why do you think the United States is losing its share of the world tourism market?

Answer: While the U.S. share of the world tourism market has decreased from approximately 16.2 percent in 1984 to 14 percent in 1988, the United States still remains the number one world destination. The fact is, the United States is competing against at least 170 other national governments for its share of the market. Many of these governments represent new-to-market destinations which hold new interest for the world's travelers.

While the total market share is slipping some, the total export revenue from international trade in tourism for the United States continues to grow at remarkable speed. In 1988 U.S. export income from trade in tourism reached $37.1 billion, establishing tourism as America's largest producer of export revenue.

Question: If the purpose of USTTA was to encourage and maintain a surplus in the tourism current account, what steps would you take to reach that goal?

Answer: As a matter of fact, USTTA's goal is to stimulate U.S. export income through international trade in tourism. In 1988 the nation incurred a small current account deficit in tourism of $2.9 billion. It is conceivable that in the next few years, helped by the implementation of visa waiver, USTTA's on-going programs, and the value of the dollar against other world currencies, the U.S. will in fact enjoy a balanced current account and possibly even a surplus.

Question: For most industries, competition exists between companies. In the tourism industry, however, competition exists between governments. Do you believe our government is doing enough to meet that competition?

Answer:	Given the resources available and the resourcefulness of USTTA's personnel, I believe USTTA is doing everything possible to compete effectively against the other nations of the world which seek a share of the international tourism market.
	A recent analysis of the agency's distribution and application of its limited resources showed that the agency is doing a very effective job in producing a return commensurate with the percentage of agency funds expended on a country-by-country basis.
Question:	Do you feel you are receiving all the facts and information you need from the various entities that make up the travel and tourism industry? If not, what information would you like to have provided either by the industry or the government?
Answer:	By and large, I have no complaints about the level or the quality of information available to assist in the execution of the agency's responsibilities.

Questions from Senator Rockefeller

Question: What experience and qualifications do you have in the area of travel and tourism?

Answer: I have a lengthy background in international business, finance, and trade. In addition, I was a member of the Los Angeles Olympic Organizing Committee and have had other similar experiences in my career.

Further, there are some very striking similarities between being an Ambassador and being the Under Secretary of Commerce for Travel and Tourism. Chief among these is that we are both charged with the responsibility of facilitating America's foreign commerce. In my particular case I had the added benefit of having at the embassy in Helsinki, a US & FCS officer who worked cooperatively with USTTA/London to carry out the agency's mission.

Question: Do you believe that the federal government has an important role to play in the development of the United States as a tourist destination? How would you characterize that role?

Answer: Yes, the federal government has several important roles. Some of those roles relate to the building and maintenance of highway and airway infrastructure. Some of those roles relate to the identification and maintenance of public recreation and historic sites. Some of those roles relate to the development of travel destinations and assets. There is also an important role for the federal government as a catalyst and facilitator to ensure that U.S. business enjoys every opportunity to compete for and capture the attention of international consumers, and as a coordinator of national policy as it relates to the ability of America's travel industry to operate as free as possible from government regulation and interference.

Question: In February I introduced a bill, S. 432, asking for the Department of Transportation to propose a plan for a scenic byways program and to study the impact of scenic byways on travel and tourism. What impact, if any, do you think that this same kind of national designation for scenic roads would have on foreign visitors to the United States?

Answer: USTTA research indicates that national parks, forests, recreation destinations and other similar facilities rank among the most important destinations and experiences for foreign visitors. Experiencing America's outdoors and traveling through America's scenic vistas are of prime interest to huge numbers of international travelers in the United States. I applaud your initiative and believe it will significantly increase the opportunities for international trade in tourism to the United States.

Question: I represent the predominantly rural state of West Virginia. When foreign visitors come to the United States, studies show that they visit California, New York, Texas, Florida, and maybe Washington, D.C. As Under Secretary for Travel and Tourism, what steps would you take to ensure that rural America benefits from the programs that USTTA undertakes? What would you do to help rural America receive a larger percentage of foreign visitors?

Answer: As the Senator knows, USTTA is right now in the middle of a major study on how tourism can be used to promote small business in rural America. The agency will hold a national conference on September 12 and 13 in Kansas City, Missouri for the purposes of reviewing the findings of that study and to develop a set of policy recommendations for the Congress's consideration.

In addition, USTTA has been working with regional organizations across America for the past several years in an effort to bring new destinations and new travel industry businesses into the international travel market. The success of these efforts can be seen in the tremendous growth in foreign visitation which is occurring in states like West Virginia, Nevada, Washington, Nebraska, the Dakotas, and Wyoming. Growth in these areas has been on the magnitude of 90 to 180 percent annually over the past two years.

USTTA will continue its product development and industry outreach efforts through how-to seminars, training brochures and other educational initiatives designed to educate and introduce American travel suppliers to buyers overseas to ensure that more of America's travel industry, particularly that part of the industry located in rural America, has an opportunity to compete for a share of the international travel market.

STATEMENT OF HON. ROCKWELL ANTHONY SCHNABEL

Ambassador SCHNABEL. Thank you, Mr. Chairman.

Mr. Chairman and distinguished Members of the Committee, I am indeed very honored to be here, and I did not know that I would be arriving to a meeting where people were going to say the kind of things that I have been hearing so far. So I am very pleased thus far, and I hope that I can live up to the things that have been said. I hope I can also step into the shoes of some of my predecessors. A certain lady whom we all know, who was in this job, has done an outstanding job. She is a good friend of mine and has given me some good marching orders. I hope to be able to add to that.

I am very honored, indeed, that the President and Secretary Mosbacher have chosen me for this job, which I deem to be a very important one. I really spent some serious time looking at it before I, in effect, decided to accept the job.

I also would like to thank Chairman Hollings for expediting these hearings.

I welcome the challenge and I look forward to working with the administration, with the House and the Senate, and with the industry very much.

During the last four months, I basically spent it getting to know the people in the agency and the industry, as well as in Congress, and I have formed an opinion very much like your own, that the industry is, indeed, much, much bigger and more important than most people give it credit. I think there is probably a fair amount of misunderstanding about the industry, and that is something that I hope to be able to do something about.

You have all heard the numbers. You know the numbers. It was interesting for me to note that tourism is a $2 trillion business worldwide, indeed the largest single industry, constituting something like 5 percent of the Gross World Product. That is very impressive.

I look forward to working with the Travel and Tourism Advisory Board. The Chairman of that Advisory Board is here today, as is one of its members. I also look forward to working with the Tourism Policy Council to coordinate Federal policy on matters affecting the tourism industry. The council will be advising USTTA on things it plans to do.

I am very impressed with the dedicated, results-oriented staff who work for USTTA—50% whom have been there for more than 10 years!

As the agency of the Federal Government charged with implementing and coordination the Nation's tourism policy, the mission of the United States Travel and Tourism Administration is very important.

Travel and tourism is a major contributor to this nation's economic and social well-being. It has a significant impact on State economies and is this Nation's second largest employer. With our ever changing economic trends, travel and tourism is increasing in importance as an economic stabilizer for areas of the country formerly dependent solely on the agriculture and petroleum industries.

The National Tourism Policy Act provides the Under Secretary with the valuable counsel of both industry and government through the Travel and Tourism Advisory Board and the Tourism Policy Council. I look forward to working with both bodies to coordinate tourism policy initiatives at all levels.

If confirmed, I will represent the President and the Secretary to insure that the national tourism interests are administered carefully, and I will work closely with this body and other Congressional Committees to support the national interest.

I very much look forward to the challenge and look forward to working with all of you.

Thank you, Mr. Chairman.

Senator ROCKEFELLER. Thank you very much, Mr. Ambassador.

Senator Lott, you may proceed.

Senator LOTT. Thank you, Mr. Chairman.

For the past several years, there have been battles between the Congress and the administration on the funding for USTTA, even though the funding is very, very meager to begin with.

Would you propose to aggressively support funding for your particular operation? As a matter of fact, in my opinion—and I am speaking as a Republican—I think we should look for increased funding here.

I realize it is a private initiative primarily, and I realize the State governments have a role. But I think that investment by the Federal Government in the promotion of travel and tourism would bring back many times more than the investment we would make.

So I would like to know what your general attitude is going to be about the funding for your administration. Do you have some innovative ideas as to how we can get more funds and significantly expand on the role of USTTA?

Ambassador SCHNABEL. Thank you, Senator.

I have indeed heard a great deal about the funding thing, and the first question that I asked Secretary Mosbacher when he offered the job to me was isn't that the agency that always has the funding problem. So I was aware of it, maybe through the press or whatever, having read about it previously.

He assured me that it would be adequately funded, and he also assured me that he himself is very committed to the concept of tourism, as is the current administration. The President has stated so also during the campaign, that, indeed, it is important.

I am convinced that the Secretary's heart is in it, that he understands and recognizes the importance of the industry, and I am convinced that the budget will be handled appropriately. The issue in the past has been that the administration has proposed a fee funding proposal, or concept, which has not in the past been accepted. But it is the intention to attempt to come up with something in that area where we can get some consensus between the agency and the Congress and the industry itself.

Senator LOTT. Well, of course, I have been opposed to these fee arrangements in the past. I understand this administration is looking at what might be referred to as a facilitation fee.

What is that, and how do you view that proposal? Are you familiar with it?

Ambassador SCHNABEL. I am somewhat familiar with it, sir. As I understand it, it is a fee payable by the airlines on a per passenger basis.

I also understand that the airlines have indicated that they are not terribly excited about it, and I think it is going to require people to sit down in a room—maybe get locked up to discuss the issue and come up with some solutions.

I have a feeling, a sense, that there may be some way, somehow, to come up with something that would work.

Senator LOTT. We all have seen the spots on television and other media, from Australia, from Canada. How do they do it? Who pays for that?

Ambassador SCHNABEL. As I understand it, it is the government that sponsors that mostly.

Senator LOTT. The Federal Government of Australia, for instance?

Ambassador SCHNABEL. Yes. I am not totally sure of that, but I understand that that is the case, as it is the case in many other countries, by the way. Spain and Ireland are very big spenders in that same area.

The United States, as the Chairman referred to, that we may be losing our percentage of world tourism, it is true, of course, that there is very strong competition out there from countries much smaller than ours but very determined and convinced that the tourism dollar is a very good dollar to go after.

Senator LOTT. I think we are really fortunate to have the tourism that we have from foreign countries because I don't think we do a very good job in encouraging it, generally speaking.

In my own area, in the State of Mississippi, in addition to areas like Natchez and Jackson, I represent the Mississippi Gulf Coast. We have had Canadians there in the past, where we did some local advertising. Now we have Japanese who are actually coming in. Since we are offering them very little, they are coming in and buying their own packages, including resort areas and hotels.

I just think that we have to give some serious thought to how we can go out there and get those dollars.

Your predecessor really is a magnificent lady and she did a great job promoting tourism and travel with very few dollars. But I think we have to do a lot more than just be a promoter or a cheerleader. We have to have a plan, a plan of action and some money. I hope that you will approach this job very aggressively, since that is the way the industry should approach their business.

Ambassador SCHNABEL. Senator, I hear what you are saying. I would intend to pursue the job aggressively, to pursue it responsibly, and to get results.

Senator LOTT. Maybe a little irresponsibility in this area would help. If we limit it to just this one area, it might be something that we could endure.

Ambassador SCHNABEL. If you would permit me to go that route, I would consider it.

Senator LOTT. Well, good luck to you.

Thank you, Mr. Chairman, for your indulgence, so I could ask those questions.

Ambassador SCHNABEL. Thank you very much.

Senator **Rockefeller**. Thank you, Senator, and thank you very much for being at this hearing. I appreciate it.

It is interesting to me, in looking over per capita spending, to note that the country that spends more per capita than any other in the world on tourism is Jamaica. The second is Israel. The third is Greece and the fourth is Cyprus. The sixth is Grenada.

All of these countries, of course, are ahead of us: Panama, Costa Rica, the Maldives, Lesotho, Yemen, Sudan, Sri Lanka, Senegal, Congo, Paraguay, and, as I indicated, Thailand and Chile, and Uganda.

Then, after several more, comes the United States.

That probably explains what I indicated in my statement: that people do not understand us as an industry. They don't understand us as an export industry, that we are in severe competition.

The 200th anniversary celebration of the French Revolution was interesting, in a sense, because it brought up again, as we see so often on television, the fact that American tourists are flooding all over Europe. Mitterrand was criticized heavily before this began. I suspect he is being criticized rather less now, because it was an extraordinary success. It is just a part of an international economy.

One of the things, Mr. Ambassador, that I want to do is to rewrite our tourism laws. They have not been touched since 1981. I, frankly, would like to do that in the spirit of tourism, as an export industry, with something of an emphasis on that. That is on the national consciousness. It certainly ought to be, and I think it is a way of mixing tourism and vital national interests in a way which is useful.

I have no doubt that you would work with me closely on that.

Ambassador **Schnabel**. Yes, sir. Indeed.

I have been given the various points by your staff that you are considering, and I have looked at those. I certainly would look forward to working with you on it because I believe it makes a great deal of sense.

Senator **Rockefeller**. Let me ask one more question and then I will turn to Senator Pressler, who is the immediate past Chairman, of this Subcommittee.

The Economic Development Administration is very important to States like my own and Senator Pressler's State. It has money, and it does all kinds of good things. But one thing it does not do is have any interest in anything that has to do with tourism.

They have categorically placed that at the bottom of their list.

I would be interested in a discussion on your part, when you are confirmed, with the administrator of EDA, to find out why it is that tourism, which means, as an industry, so much to my State, and Senator Pressler's and all of those who you have heard here, and indeed the country, why it is that EDA, which is a source of funding for States, for projects, why tourism is not allowed to be seen as something which can have economic development advantage to a State.

I wonder whether you would be willing to do that.

Ambassador **Schnabel**. Yes, sir.

I have heard about this possibility. I am not very familiar with it. I certainly would look forward to pursuing it.

Senator **Rockefeller**. I would be glad to work with you in preparing for that, because it is something that has been extremely frustrating to us. I see it as a legitimate economic development. For South Dakota, nor West Virginia, California, Texas, or Connecticut, development to us may mean different things than they do to other States, and tourism is very substantially a part of our development. I think that this is a legitimate question to ask.

I would call on Senator Pressler for any statement or any questions that he might have.

OPENING STATEMENT BY SENATOR PRESSLER

Senator **Pressler**. Thank you very much, Mr. Chairman. I join in your remarks and in welcoming Mr. Schnabel as the nominee for the position of Under Secretary of Commerce for Travel and Tourism.

It was my pleasure to chair this Subcommittee some years ago, and although I am no longer a Member of the Subcommittee, I am a Member of the Commerce Committee, and I follow its matters closely and I want to be very supportive.

I think that our nominee's record of service as Ambassador to Finland and in other capacities indicates that he will make a great under secretary.

As a matter of fact, it was my pleasure to chair the European Affairs Subcommittee when he was confirmed by the Senate Foreign Relations Committee. So I am going back to the "good old days," when we were in control of the Senate.

Senator **Rockefeller**. I understand.

Senator **Pressler**. Be that as it may, I also wish to commend Charles Cobb, the outgoing USTTA head, for his dedication to the task of formulating and executing a National Tourism Policy. Under his leadership, USTTA has made great strides in the last year. I might say that Mr. Cobb has done a lot on the international front to get the State Department more involved. I hope that Mr. Schnabel will do the same.

I know that all States have an interest in tourism. In my own State, we have 2 million tourists per year visiting Mount Rushmore and the Black Hills. That is our second largest industry in terms of employment.

So it is not just the coastal States or the big city States. We need to make more efforts at getting tourists throughout our country, in terms of what our embassies display as points of destination and so forth.

Also, as head of the USTTA, you will have a unique responsibility in working with the tourism industry. Most of the people who will approach you or work with you are the large companies.

Now, I have nothing against large companies. All small companies dream of being large companies. But there are also many small businessmen and entrepreneurs in the tourism industry. In fact, there are more minorities and women as entrepreneurs in the tourism industry than almost any other area of business in the United States.

So also I think you need to make a special effort to listen to that grassroots tourist entrepreneur and traveler, and not just the huge companies and hotel chains who will perhaps have more access to you.

There has been a lot of talk about balance of trade. I think we all appreciate the role of travel and tourism, and I think the Chairman was talking about that as I walked in.

Over 34 million foreign visitors came to the United States last year and spent billions of dollars during their stay. Their contribution to our Nation's economy at this time provides employment to over 5.5 million people.

My State entertains over 100,000 foreign tourists annually.

For years, I have pushed the idea that more training in the travel and tourism industry should be given to some of our Foreign Service officers. As they go through their training here as young Foreign Service officers, they do get training in agricultural exports and other fields.

Since the influx of foreign tourists is vital to the well-being of our economy, it only makes sense to have tourism specialists on staffs in our embassies.

I am pleased that former Under Secretary Cobb began to work in that direction, and I urge you to continue that effort.

I am also concerned with the level of funding for USTTA. With slightly over $10 million a year to do business, the agency isn't able to fully meet its potential. For example, if funding were tripled, there would be tremendous expansion in the agency's marketing policy, research, and operational strategies.

I look forward to working with the Chairman and my colleagues on the Foreign Commerce and Tourism Subcommittee in exploring the increased importance of additional funding for USTTA.

I want also to say that I take a special interest in USTTA because I sponsored the bill in the Senate that created the USTTA and the Under Secretary's job. So you may get a car and a driver because of me. I just want you to know that.

So, Mr. Chairman, I congratulate you on this hearing and I congratulate the nominee. He has a lot of hard work ahead of him. He is going to have to work to get private funding mixed with public funding. He will find his hardest job perhaps is listening to the average tourist, the average traveler, and the small businessman in this business.

I wish him well. I think there is an immense opportunity in the foreign area. We can use the computer system of our embassies to list points of destination. This is not advertisement. But if each State could have five points of destination listed, for example, in every embassy, that would be very useful information to be available around the world, at probably no extra cost with the communication system we already have.

We need to get our young Foreign Service officers more attuned to the importance of the balance of trade. We like to see those foreign package tours coming and spending their currencies to buy dollars.

So, with that, I conclude.

We once had a hearing here, Mr. Chairman, with Herman Kahn, the futurist. He said that by the year 1990, tourism may well be the United States' main source of foreign currency.

This will not quite be true. He said that several years ago, before his untimely death. But in his look at the future, he pointed out that a liberal arts education in Europe and Japan now includes a trip to the United States, whereas it used to be the grand tour for American liberal arts students to go to Europe. That has been reversed to some extent.

So people are coming here to study us, and that is a good sign. I wish you well in your new duties.

Ambassador SCHNABEL. Thank you very much, Senator.

Senator ROCKEFELLER. Thank you, Senator Pressler, very much. Mr. Ambassador, it interested me in that, I guess it was yesterday, the Department of Commerce USTTA put out a news bulletin that, in fact, in counting the amount of dollars that had been spent by foreigners in this country, they had computed wrong, and it was actually $12.4 billion more than had been reported. This shows you that, when you make a mistake in this business, it can be a largely one. I think that is sort of endemic of the magnitude of what it is that we are dealing with.

Why is it, do you think, that the Europeans do so well? They have, of course, history, and all of that. But what is it that they do differently, specifically, that makes tourism seemingly so much more easy for them and their governments so much more willing to participate?

Ambassador SCHNABEL. I believe, Mr. Chairman, that Europeans grow up talking, learning, and knowing exports. You cannot live in Europe without knowing something about foreign currencies, foreign languages, and exporting, because you cannot survive unless you export.

So I think it is logical that they would also look to one of the largest export industries, tourism. Pursuing that, you have ministries of tourism in Europe in many countries, or in some of the countries. They spend substantial money and realize that it is a very meaningful, important business.

But I think that that is something that, historically, has been there simply because people, recognizing the environment that they have grown up in, know that exports are a lifeline. That is something that has not been the case in this country because oftentimes smaller businesses never had to export. It has only been fairly recently, really, that everybody is talking about that, the issue of exports. I think it is logical, of course, that tourism is part of that. But it needs more education of the people to understand that and to be more active in it, I think.

Senator ROCKEFELLER. And thus, the linking of tourism and exports may be one of the ways to cause Americans, including the Congress, to understand why spending money on tourism is not something which is wasteful, but which is extremely important.

Ambassador SCHNABEL. I believe that would be a good educational premise.

Senator ROCKEFELLER. It is my judgment, incidentally, that the reason—and, Senator Pressler, you know this better than I—that every year the Senate puts in money and the House puts in a zero—and then thank God for Chairman Hollings of this Committee because he sits on the subcommittee of the Appropriations

Committee where the budget for USTTA is decided. He takes care of all of us.

Were he not there, we would be in trouble. It is my understanding that the House doesn't put money in because there are several individuals over there who simply say look, this thing is booming it's doing terribly well, and I can't spend this kind of money on tourism, where I could be spending it on homelessness or poverty or something else of that sort.

This strikes me as an attitude that we need to change. It is wrong that the House zero USTTA each year. It is wrong that they do that. It is not fair to the Senate. It depends too much on the presence of the Chairman of this Committee. He had an opportunity to be head of another subcommittee of Appropriations last year. He declined to take it, thank God, so we will be protected.

But we are at some peril in this, and I would hope as time goes by, as we discuss these individuals, that we would have a chance to talk to them about their views and perhaps change their ideas.

You and I talked briefly about scenic byways, and I indicated that I had introduced a bill on scenic byways. I did it with the idea that 80 percent of Americans do recreational driving, which is not to get to the grocery store, which is not to get to work, which is not to go to a ballgame. But it is, pure and simple, Americans getting into a car, and this is across all age groups, and driving for the purpose of being together and seeing things, this being recreation. They would see things of historic interest, things of cultural interest, things simply of beauty.

Our interstates are magnificent. They get us to where we want to go. And in some places, they are spectacular, but in most places they are not. Our country is filled with hundreds of thousands of miles of beautiful roads.

There is no need under a scenic byways bill to build a single new road, but simply for USTTA, working with the Department of Transportation, to re-inventory, something which has not been done since 1973, which are our scenic byways in this country. Eighty percent of the people are out on them. They are rural roads, farm roads.

There are these kinds of roads I am interested in. They can be, it would seem to me, under the 1991 Highway Bill, emphasized and helped with things like overlooks, turnoffs, not new roads, but simply modest enhancements, such as signage. When you and I talked, we discussed a particular place in West Virginia. Well, there are many places where people drive right by them, and they don't know that some spectacular things have happened there.

When I was Governor of West Virginia, we had to put an exhibition on at the Knoxville World's Fair. We were casting about for what to do. We didn't have to do it, but we wanted to do it.

Somebody had put together an artificial coal mine. Obviously, it was something you could take down to Knoxville. In it there was the mine, what a mine looks like, and there was a sense of the tradition of a mine, you know, the mule, the cart, the pick, the shovel, the gattling gun, representing the mine wars of the past, the union history, the bloody history, and the way people lived.

It was a good exhibition and we sent it down there. What we did not expect was that it turned out to be the single, most attended of all of the exhibitions at the Knoxville World's Fair. This said to me that what it is that some of us take for granted geographically—in our case coal mines, tipples, company stores, company houses—we are busy tearing them down, and other people would pay good money to go and see them.

We are working on something in West Virginia called "Coal Ways," which would not build a single road, but which would simply designate, let's say in one or two counties, an area where we would preserve company towns, preserve tipples, preserve coal mines, preserve the company store.

They are doing that in Scranton, Pennsylvania. Thousands, tens of thousands of people are coming there and they are making a lot of money off of it. They thought it was something people did not want to see.

Well, my point is belabored, but it is never under-estimate the curiosity, not only of the American tourist in driving, but also of the foreign tourist and what it is that is our cultural heritage, as well as what may be beautiful. Coal mines do not tend to be beautiful, but they do tend to have great historic interest.

I think I am making a speech rather than asking a question. But scenic byways, some people may look at that and may say my God, Senator Rockefeller is trying to make a move on the 1991 Highway Bill and set aside billions and billions of dollars for a lot of construction of new highways. That is just ridiculous.

Some people may look at it and say good grief, this is going to be a battle between those who favor billboards and those who do not favor billboards. My attitude is that that is all irrelevant.

The country roads are out there. People are traveling on them the way they are now. Some have billboards and some don't. It depends on the State, I suppose, or it depends on the health of the local economy.

But the point is that a lot can be done, it seems to me, for tourism. People don't travel as long. The economy is not as good. They take short trips, such as weekend driving. That is just simply a fact.

I would ask, as I did yesterday, if you would be willing to take a very close look at the scenic byways effort and to perhaps join up with me in terms of either working with the Department of Transportation or working with the Congress in trying to figure out what might be a sensible approach toward what I think is a very easy opportunity, and an inexpensive one.

Ambassador SCHNABEL. I have indeed looked at it and during our discussion yesterday, I learned some things that I did not know.

I do know, as far as some Europeans are concerned, that oftentimes people come here to see the principal sights. After one or two trips, they have seen that there is a lot of interest over there—we are talking about 300-plus million people in the European Community—in the United States for other reasons than just going to Disneyland here. The United States is the leader of the Free World and, therefore, they want to see its culture.

From what I understand your proposal to be, it is to, in effect, encourage traveling right into the areas where one can experience American culture that you don't see in New York City or some of the major cities that people tend to go to often.

So I would very much like to take a very serious look at it and learn about it more and to work with you on your proposal.

Senator ROCKEFELLER. Good. I thank you very much for that.

USTTA itself, my hope is that you are going to have more money this year, and I think you will.

One of the problems is that the tourism industry in this country does not always see itself as linked. So you will have, let's say, airlines or hotels or rent-a-car places which see themselves somehow as separate from other groups. The bringing together of the tourism business in this country I think is important, not only for coordination but also, quite frankly, for striving for that day when we can find some funding mechanism upon which the tourism industry can agree.

I don't think that is going to be this year. I am quite certain that it is not going to be this year. But if Chairman Hollings takes another subcommittee in Appropriations, there is going to have to be some pretty quick backup. I think part of that depends upon the solidarity of the industry itself.

I would hope, Ambassador Schnabel, that that would be a matter, sort of an esoteric matter, an indirect matter, which you might address—bringing them together to see that they have a common interest in this, more than they are together these days.

Ambassador SCHNABEL. Mr. Chairman, I understand what you are saying, and I think that that is probably a function that should be pursued by the Under Secretary of USTTA. I definitely would intend to do that, and I would enjoy doing it. I think it would be a challenge that is an interesting one.

I have had a chance to meet with some of the industry leaders, and I have found that, to a person, they are supportive of the efforts of this agency. I have yet to run into anybody who is highly critical of the agency.

So, somewhere along the line I would think there is a way to get together and to all go into the same direction in the future. So I would intend to pursue that.

Senator ROCKEFELLER. Good.

Ambassador Schnabel, I have no further questions that I want to ask you. I really think that you are going to be superb.

Tourism is an extraordinary industry, of extraordinary importance to this country. We now support it in our government to the level of $13.8 million. I mean, I really do find that amazing.

Donna Tuttle, I think it was, started the business of getting together with the airlines—and did some television advertising overseas, so that it would not all have to be paid for by the Federal government. My experience as governor is that, when you start advertising, in the case of West Virginia, in the Cincinnati market, or Richmond, Pittsburgh, or Philadelphia, you get results. You can wait two or three weeks and can then just start counting the results.

Of course, it is expensive. But the results are immediate.

Now it is the domestic market that I am talking about.

In this other case, the advertising was done in England, I believe, and you could measure the results. If we are talking about increasing exports, and there are such obvious mechanisms for increasing those exports, as advertising, and where we have to be, therefore, intelligent about trying to combine public and private moneys and leveraging as much private money as possible, I would hope—and, in fact, I don't put this in the form of a question because I am sure you will be very, very aggressive in pursuing how we can simply market ourselves, even to the extent of advertising, overseas.

I assume you would agree with that?

Ambassador **Schnabel**. Yes, sir. I do, indeed.

Senator **Rockefeller**. I wish you well. I am told that there will be a markup in the first week of August, which is still three weeks from now. I regret that. But it will come soon.

I think the feeling about you is not just that we are trying to be friendly, but is very genuine, I think. You have a broad background. You are extremely experienced overseas. You have extensive corporate experience, and you are interested in the job, and you want to do it well.

I look forward to casting my vote for you, both in this Committee and on the floor.

I wish you well, sir. I thank you and your wife Marna for your attendance at this hearing.

Ambassador **Schnabel**. Thank you very much, Mr. Chairman. I am also looking forward very much to working with you. I am delighted to hear of the support and the interest that you have in the industry and the conviction that, indeed, it is great. That conviction is something that I have also picked up here in the last four months in my training sessions.

So thank you very, very much for the hearings.

Senator **Rockefeller**. Thank you.

This hearing is adjourned.

[Whereupon, at 3:49 p.m., the Committee adjourned, to reconvene upon the call of the Chair.]

NOMINATIONS—JULY

FRIDAY, JULY 21, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The committee met at 9:36 a.m., in room SR-253, Russell Senate Office Building, Hon. Albert Gore presiding.

Staff members assigned to this hearing: Mike Nelson; and Pat Windham, professional staff members; and Ruth Johnson, minority professional staff member.

OPENING STATEMENT BY SENATOR GORE

Senator GORE. The subcommittee will come to order. Good morning and welcome. The Senate was in session last night until 1:30 this morning, so if some of us are a little slow getting started this morning, that is the reason why.

Today the Commerce Committee considers the nomination of Dr. Allan Bromley to be Director of the White House Office of Science and Technology Policy. The Director of OSTP is the highest ranking science official in the Executive branch, with a critical role in setting priorities and coordinating the Federal Government's science and technology policy.

Traditionally, the Director of OSTP also has served as the President's personal science advisor, providing guidance on the whole range of science and technology issues. There has been a lengthy and, in my view, unseemly delay by President Bush in filling this important post, but by nominating someone as well known and as widely respected as Dr. Bromley, President Bush has indicated that he intends to take science seriously.

The President has announced that he will appoint Dr. Bromley as the Assistant to the President for Science and Technology. As such, Dr. Bromley would presumably have direct access to the President.

The other members of the Commerce Committee and I are glad to see the President giving new attention to science and technology policy. And we are particularly glad to see more attention given to OSTP.

Under the Reagan Administration, OSTP was all but ignored. Its budget and staff shrunk by more than 50 percent, and the office was not able to carry out the many critical tasks that the Congress had assigned to it.

According to the legislation establishing OSTP, the director's primary role is to provide, within the executive office of the President, advice on the scientific, engineering and technology aspects of issues that require attention at the highest levels of government. Yet, when President Reagan decided to give his famous Star Wars speech, he did not tell his science advisor about it until just beforehand. There was no time at all to evaluate the scientific merits of the largest new science venture of the last administration; no time to separate the possible from the impossible.

Time and again, multi-billion dollar decisions affecting science and technology were made without consulting the scientists themselves. Too often in that administration, science and technology policy was based more on the whims of speech writers than on sound scientific analysis.

Indeed, if SDI had been subjected to the same peer review as say, cold fusion, the Nation might have been spared a tremendous waste of resources.

Science and technology policy is, in short, too important to be left to speech writers. America will not remain competitive in world markets without the stream of new ideas and new inventions flowing from our laboratories. We will not maintain our standard of living unless we continue to educate Americans to be the world-class scientists and engineers needed to turn new discoveries into quality products.

We will not find cures for cancer, heart disease, AIDS and other diseases without continued strong support for biological research. We will not seize the enormous opportunities biotechnology has to offer without a strong, effective mechanism ensuring that government agencies are all working from the same game plan.

And we will not understand or deal with the threat of global warming and ozone depletion without a better understanding of the damage that man is doing to the planet and more innovation in forging solutions.

When I look at all the unresolved issues in science policy, I am reminded of the oft-quoted ancient Chinese saying, "May you live in interesting and exciting times." Well, Dr. Bromley, these are certainly very interesting and exciting times for science policy, and OSTP will be a very interesting place to be in the coming years.

These are interesting times for many reasons. We have unparalleled scientific opportunities to learn more about our universe and to improve the quality of life around the world. We are faced with complex problems which will challenge our scientific and technological capabilities in new and unprecedented ways—problems like overpopulation, world hunger, a deteriorating environment, AIDS, and others.

But, Dr. Bromley, what makes your job most challenging is that we must deal with these opportunities and these problems within the constraints of a very tight federal budget. That tight budget requires making tough, difficult choices.

We have the scientific and technological talent to enable us to colonize the moon, to sequence the human genome, to build the Superconducting Super Collidor. We could eradicate tropical diseases killing hundreds of thousands of people every year. We could vastly improve our understanding of how the Earth works, send men to Mars. But we cannot do it all, at least not right away. The deficit is forcing the Congress and the Administration to make choices.

So, today, we want to begin an examination of some of those choices and how the Federal Government will make them. The Commerce Committee and OSTP are key players in science policy. The world is changing and we have to evaluate past policies and adjust them if necessary in order to reconcile competing demands.

We must examine the appropriate balance between civilian and military scientific research and development funding.

Under the last administration, the R&D funded for the military rose from 50 percent of the total to almost 70 percent of the total. Yet, in that same time, the world has changed greatly. For example, East-West political tensions have been declining. International economic competition has been mounting. And evidence has been piling up that human pollution is altering the global environment in heretofore inconceivable ways.

In light of these changes, is it still appropriate to have two-thirds of our science budget going to the military? And even if we conclude that both military and civilian science spending should be equal priorities where are the additional funds to come from?

We also have to consider the balance between basic and applied research. The United States leads the world in basic research. Other countries like Japan have reaped economic rewards by focusing on applied research; on designing better products and more efficient manufacturing processes. Should we follow their lead and increase funding for applied research in order to compete with the Japanese in world markets?

That is a question of science policy that the Commerce Committee has been examining a great deal in recent months, under the leadership of Chairman Hollings, as we have considered the need for more funding to develop HDTV, advanced semiconductors, supercomputers, and other projects.

We must be increasingly watchful of changes in U.S. priorities and the potential conflicts of interest that can develop with some of these changes; for example, as universities are forced to scramble for funds, turning to industry to maintain their programs.

U.S. scientific research should not be directed by corporate priorities solely, but by scientific and national priorities.

We also need to work to resolve the debate over big science versus little science. How can we strike a balance between big science projects like the Space Station and the Superconducting Super Collidor, and small research grants to individual scientists funded by the National Science Foundation and other agencies?

We need to focus on this question now.

Right now, the Appropriations Committee is making decisions that will determine whether and how quickly we build the Space Station and the SSC.

So we need a coherent, long-term science strategy that will allow us to avoid making these decisions on a year-by-year, piecemeal basis.

No discussion of science and technology policy would be complete without talking about science and engineering education. A concern that has been expressed at dozens of recent subcommittee hearings here is that we are simply not educating enough new scientists and engineers.

At hearings on global warming, on NASA, on advanced computing, and on other topics, witnesses have repeatedly described the consequences of a scientific manpower shortage. The picture is not pretty. Without better primary and secondary science education, the U.S. will be unable to continue its tradition of excellence in science and its leadership in technology; and our standard of living might well fall. We can prevent that, but we must move now.

So we look forward to hearing your views on these topics, Dr. Bromley, both today and in the future.

In September, after the August break, this subcommittee will hold a series of in-depth hearings on U.S. science policy. I have had an opportunity to discuss that project with you privately. And at that series of hearings we will have a chance to go into more detail on the issues that I have briefly touched upon here, as well as many other issues we have not discussed yet.

Let me recognize my colleagues. First, the ranking Republican member of the full Committee, Senator Danforth.

Senator DANFORTH. I do not have any statement, Mr. Chairman. Thank you.

Senator GORE. Senator Stevens.

OPENING STATEMENT BY SENATOR STEVENS

Senator STEVENS. Mr. Chairman, I did not have a statement, but I have one now. It is very short, but having been one that participated in the whole decision to create an SDI, I do hope that your hearings that you are talking about will go into that subject so that perhaps you will have some basic information as to how it happened.

There were a multiplicity of isolated research projects going on; I think many of the people in this room know much about them, some of them from the 1930s, particularly in radio wave frequency and other such research projects. The President found that those isolated research projects were costing us a great deal of money, and they were not targeted towards any specific objective. He put them under a coordinated management scheme under firm direction. And I think the world knows the results.

It brought the Soviets back to the bargaining table. I think it was one of the driving forces behind INF. It is still one of the driving forces behind the ongoing negotiations for a strategic treaty and for a space and defense treaty. And it has had the overwhelming support of the Congress now for a period of nine years. And I think once again this year we will provide about 1 percent of the defense budget, and that is what it is, about 1 percent of the defense budget, to determine whether it is possible to have a non-nuclear response to a nuclear attack.

And I will continue to defend that. And I hope your hearings here will give those who do defend it an opportunity to come forward and correct this record.

I had dropped by to pay my respects to Dr. Bromley. I understand we have two of our colleagues here to present him, and I will be pleased to do that. We have another subject, and that is the civil contempt of Dr. Morgan, which will take me away.

Thank you.

Senator **Gore**. Let me just say briefly that it was not my purpose to initiate a debate here about the scientific feasibility of SDI as originally programmed by former President Reagan. And in the hearings this fall, that subject will be touched upon only insofar as the scientific questions surrounding it were approached or not approached in a wise way.

The point I was seeking to make is that the assertion that it was scientifically feasible to construct a leak-proof electronic Astrodome, as originally stated by former President Reagan, was not run by his science advisors in advance of the announcement. The current administration has now officially said we believe that is not feasible. And a major change in the focus of that program seems to be apparent.

But, again, there are plenty of other opportunities for the Senator from Alaska and I to debate that question. And I agree, as a member of the Arms Control Observer Group on which the Senator has played a leadership role, that at least SDI has found a use at the negotiating table if we so employ it.

In any event, we want to welcome Senator Lieberman to introduce our guest. And, Dr. Bromley, if you would come up to the witness table. We would like to welcome your wife and daughter, also. We are very pleased that they can join us here today.

I have a statement from the Chairman of the Committee, Senator Hollings, that I will include in the record. Also, Senator Dodd wishes to send his best wishes and regrets that he was called back to Connecticut. But Senator Lieberman, you are recognized.

[The statements follow:]

OPENING STATEMENT BY THE CHAIRMAN

I am pleased to welcome Dr. Allan Bromley before the Commerce Committee today. Dr. Bromley has very impressive credentials, and his career has been a distinguished one. I am glad that President Bush could attract such a talented candidate for the Office of Science and Technology Policy (OSTP).

We are fortunate that you, Dr. Bromley, have chosen public service. Your experience in research, in academia, and on government advisory panels has prepared you well for this new job. You already know many of the players, and you seem to already know the ways of Washington. I was very impressed to learn that you have already been able to convince OMB to request a 50% budget increase for OSTP for fiscal year 1990. If you can do that even before you are confirmed, I expect great things in the months and years ahead.

If confirmed, you will face many challenges, not least of which will be dealing with OMB. OSTP has an important role to play in coordinating research and development budgets of the different science agencies. This role is especially critical when budgets are tight and we have to make every research dollar count.

There are two pressing problems which no doubt will occupy much of your time at OSTP—economic competitiveness and global change. If the Federal government does not develop a coherent strategy to keep America competitive, the U.S. risks becoming an economic also-ran. If the Federal government does not develop a coherent strategy to deal with global change, the whole world risks becoming an ecologic also-ran. Because science and technology are central to both issues, OSTP will have a critical role in developing these strategies.

Two months ago, this Committee reported S. 169, which I introduced in order to coordinate research on global warming, ozone layer depletion, and other aspects of global change. A well-run, well-implemented research program is critical if we are to understand and address these threats to our planet. S. 169 requires that OSTP work with the agencies and OMB to produce a coherent budget plan for global change research. Getting more than a dozen agencies to work together is no easy task, but OSTP was designed for that purpose. The OSTP's Committee on Earth Sciences (CES) has shown that OSTP can provide the necessary coordination. CES is scheduled to soon release its detailed plan for global change research funding for fiscal year 1991 and beyond. We look forward to seeing that plan and working with OSTP to implement it.

I hope that under Dr. Bromley's leadership OSTP can provide coordination in other areas as well. Today, many scientific problems are so complex that only a multi-agency effort can solve them. Regulating biotechnology, dealing with acid rain, and protecting our groundwater are all tasks which involve three, four, or more agencies. None of these efforts can succeed without high-level guidance and coordination from OSTP.

Dr. Bromley, OSTP and the Commerce Committee will have to work together on dozens of important issues in the coming years. We hope that you will be a frequent visitor to Capitol Hill, both for hearings and for informal meetings. Together, we have many challenges to face and many opportunities to seize.

I look forward to the Commerce Committee's consideration of your nomination and to working with you in the future.

STATEMENT OF HON. CHRISTOPHER J. DODD, U.S. SENATOR FROM CONNECTICUT

Mr Chairman, I am pleased to appear before you this morning to introduce to the Commerce Committee a leading citizen of my home State of Connecticut—Dr. Allan Bromley.

President Bush could not have made a finer choice than Allan Bromley for the position of Science Advisor to the President and Director of Office of Science and Technology Policy.

Simply stated, Dr. Bromley is one of the world's leading nuclear physicists. He presently serves as the Henry Ford Professor of Physics and Director of the A.W. Wright Nuclear Structure Laboratory at Yale University in New Haven, Connecticut.

I know that his colleagues at Yale consider Dr. Bromley a dedicated teacher and gifted researcher. Since he founded the Wright Nuclear Structure Laboratory at Yale in 1963, he has personally supervised the doctoral research of some fifty graduate students. In fact, a recent survey of the world's nuclear physics laboratories showed that more than fifty percent of those in charge had spent time as graduate students, as postdoctoral fellows, or as faculty members in Dr. Bromley's laboratory at Yale.

In addition to his research and teaching, Dr. Bromley has been a very active senior member of the international science community and a leader in both national and international science policy circles.

He has been a member of the White House Science Council since 1981. In that capacity, he played a key role in the production of two of the most influential science council reports—those on the Federal laboratories and on the health of our Nation's colleges and universities.

Dr. Bromley also is a member of the advisory board for the National Academy of Sciences, the Council on Foreign Relations, and the National Science Foundation. In 1988, President Reagan awarded him the National Medal of Science—the Nation's highest scientific honor.

Dr. Bromley's nomination is especially timely because of his previous experience and continued interest in working to improve the Nation's mathematics and science studies and confronting the real and dangerous trend of worldwide global warming.

It is my sincere belief that following Dr. Bromley's confirmation, this distinguished Yale man will provide outstanding scientific advice to a fellow Yale man, the President, and will play a significant role in dealing with math and science education, global warming and other science related issues of vital importance to the future of this country.

I applaud the President's nomination of Dr. Allan Bromley and introduce him to my colleagues today with my enthusiastic support.

STATEMENT OF HON. JOE LIEBERMAN, U.S. SENATOR FROM CONNECTICUT

Senator **LIEBERMAN**. Thank you, Mr. Chairman. Mr. Chairman and members of the committee, I am delighted to be here, although I must say that I have not had the opportunity to miss you much since I left you at 1:30 this morning.

Senator **GORE**. That is right.

Senator **Lieberman**. It is a real honor for me to be here to introduce Dr. Allan Bromley. And I must say, in some sense it is a measure of the openness of American society that I, a lowly political science major while at Yale, could somehow find myself in the position to introduce one of most distinguished members, not only of the Yale science faculty, but one of the most distinguished members of the American and world scientific communities.

This Office of Science and Technology Policy, as you have indicated, Mr. Chairman, is a very important one. In my opinion, and hopefully I say this, under President Bush, will become increasingly important because of the extent to which science holds the key to so many of the seemingly non-scientific challenges that we face as a nation.

The connection between science and space exploration, which we celebrated yesterday, is obvious. Perhaps less obvious, but critically important is the connection between science and our world economic competitiveness. And also clear, I think, is the connection between scientific research and understanding in our attempts to better control and keep clean our world environment.

I cannot think of a better person, acknowledging my regional bias, to lead the Office of Science and Technology Policy at this time of challenge and importance than Dr. Allan Bromley.

Dr. Bromley, as you know, is an internationally-recognized physicist. He is the founder and present head of the Arthur Wright Nuclear Structure Laboratory at Yale, where he is also the Henry Ford II Professor of Physics.

Dr. Bromley has been on the advisory board of the National Academy of Sciences. He has been active in the Council on Foreign Relations and the National Science Foundation. And in 1988, he was awarded the National Medal of Science by President Reagan.

He comes to this committee today and to this office with a unique combination of skills. An obviously experienced and established, tremendously respected scientist, but really a man of the world, who shares our concerns about the way in which science interacts with public policy.

I think he will be an extraordinarily effective advocate for the needs of our country as science can meet them, and also an educator in the finest sense of that word—an educator of the President and members of Congress, and an educator of the American people, to the extent to which I am sure he will play a leading role in raising up the level of science and math education among our children, who obviously are the best answer that we will have to the questions that science raises for us.

So, I congratulate President Bush on this appointment. And I am delighted to introduce him to this committee this morning with my wholehearted support. And as you indicated, Mr. Chairman, with the wholehearted support of my senior colleague, Senator Dodd.

Thank you very much, and Dr. Bromley, good luck.

Dr. **Bromley**. Thank you.

Senator **Gore**. Thank you very much, Senator Lieberman.

Dr. Bromley, you are most welcome. We are delighted to have a chance to hear from you. We wish you well. We will have questions after your statement, and we are anxious now to hear from you.

[The biographical sketch and questions and answers follow:]

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[illegible], SOUTH CAROLINA, CHAIRMAN
[illegible]
[illegible], TEXAS
[illegible], ALASKA
[illegible], CHIEF COUNSEL AND STAFF DIRECTOR
[illegible], MINORITY CHIEF COUNSEL AND STAFF DIRECTOR

United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: BROMLEY (Last) D(avid) (First) Allan (Other)

Address: 35 Tokeneke Drive (Current residence)
North Haven, CT. 06473

Yale University, A. W. Wright Nuclear
Structure Laboratory, 272 Whitney Ave.,
P. O. Box 6666, New Haven, CT. 06511

2. Position to which nominated: Director, Office of Science and Technology Policy

Date of nomination: June 6, 1989

3. Date of birth: May (month) 4 (day) 1926 (year)

Place of birth: Westmeath, Ontario, Canada

4. Marital status: Married

Full name of Spouse: Patricia Jane (Brassor) Bromley

5. Names and ages of children:
David John (36)
Karen Lynn (33)

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Queen's University	1944-1948	B.Sc. (Hon.)	1948
(Kingston, Ontario, Canada)	1948-1949	M.Sc.	1950
University of Rochester	1949-1952	M.S.	1950
(Rochester, N.Y.)		Ph.D.	1952

[redacted]

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From To Name of employer Address Type of work

June-Sept., 1948 National Research Council of Canada, Ottawa, Can. Jr. Research Officer

Jan. 1952-July 1955 University of Rochester, Rochester, N.Y. Instructor then Asst. Prof., Ph

Aug. 1955-August 1960 Atomic Energy of Canada, Ltd., Chalk River, Ontario, Can., Sr. Rese
Officer + Section Head

August 1960 - Present Yale University, New Haven, CT. 06520

a) Assoc. Prof., Physics 1960-61; b) Professor , 1961-present; c) Henry Ford II Prof., 1972-present; d) Chairman, Physics Dept. 1970-77; e) Director, A. W. Wright Nuclear Structure L
1963 - present.

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

White House Science Council: a) Member 1981-present

Office of Science + Technology Policy: a) Consultant on Nuclear Physics 1976-79; b) Chairman, Presidential Panel on Indo-US Cooperation in S & T, 1982-present; c) Chairman, Presidential Panel on Brazil-US Cooperation in S & T, 1986-present; d) Vice-Chairman, Panel on the Health of U.S. Colleges and Universities, 1984-1985.

National Science Foundation: a) Member US/USSR Working Group on Scientific Manpower and Education 1972-1973; b) Chairman, Subcommittee to Review University-Based Nuclear Science Laboratories, 1979:

Please see continuation sheet

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

Registered as independent

One of the initial members of the National Executive Council of Science and Technology Leaders for Bush-Quayle. My wife and I each contributed $100.00 in support of the Bush campaign.

No other political activities

[redacted] [redacted]

Continuation of Answer to Question 8 (D. Allan Bromley)

National Science Foundation
- c) Member, Alan T. Waterman Award Selection Committee, 1980-1983
- d) Member, National Science Board, February 1989-present

U.S. Civil Service Commission
- a) Member, Presidential Award Selection Committee 1981-1982

U.S. Department of Energy
- a) Member, High Energy Physics Advisory Panel (HEPAP) 1973-1977
- b) Member, US/USSR Coordinating Committee on Research on the Fundamental Properties of Matter (JCC/FPM), 1972-present
- c) Member, Nuclear Science Advisory Committee (NSAC), 1981-1987
- d) Member, Basic Energy Sciences Evaluation Review Committee, 1981
- e) Member, Energy Research Advisory Board Panel on Interactions with Universities, 1982-1983
- f) Chairman, NSAC Panel on Electron Accelerator Facilities, 1982

[redacted] [redacted]

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Please see attachment

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Please see attachment

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

Please see attachment

[redacted] [redacted]

Continuation to Question 10 D. Allan Bromley

Memberships

1967-1989	UNC Incorporated	Director	Annapolis, MD.
1972-1975	Extrion Corporation	Director	Gloucester, MA.
1973-1989	United Illuminating Co.	Director	New Haven, CT.
1976-1989	Northeast Bancorp, Inc.	Director	Stamford, CT.
1976-1989	Union Trust Company	Director	New Haven, CT.
1980-present	General Ionex	Director, Scientific Board	Newburyport, MA.
1981-1985	University of Bridgeport	Member, Board of Trustees	Bridgeport, CT.
1972-1980	General Telephone & Electronics Company	Member, Technical Advisory Board	Waltham, MA.
1984-1985	Chronar, Inc.	Director	Princeton, NJ
1976-1989	McGraw-Hill Publ. Co.	Consultant	New York, NY
1973-1989	U.S. Department of Energy (formerly ERDA)	Member, High Energy Physics Advisory Panel	Washington, D.C.
1974-present		Member, US/USSR Working Group on Research on Fundamental Properties of Matter	
1981-1986		Member, Nuclear Science Advisory Committee	
1981-1982		Member, Basic Energy Sciences Evaluation Review Committee	
1979-1980	National Science Foundation	Chairman, Subcommittee to Review University Based Nuclear Science Laboratories	Washington, D.C.
1980-1984		Member, Alan T. Waterman Award, Selection Committee	
1988-1994		Member, National Science Board	
1982-1989	Office of Science & Technology Policy	Member, White House Science Council	Washington, D.C.

[redacted]

1981-1982	U.S. Civil Service Commission	Member Presidential Award Selection Committee	Washington, D.C.
1974-1980	American Association for the Advancement of Science	Member & Fellow	Washington, D.C.
1978-1980		Chairman, Physics Section (B)	
1980-1981		President-elect	
1981-1982		President	
1982-1983		Chairman of the Board	
1967-1980	Oak Ridge Associated Universities, Inc.	Director	Oak Ridge, TN.
1965-1974	National Research Council-National Academy of Science	Chairman Committee on Nuclear Science	Washington, D.C.
1967-1974		Member, Exec. Committee, Div. of Physical Science	
1974-1978		Member, Exec. Committee, Assembly of Mathematical & Physical Sciences	
1975-1976		Chairman, Office of Physical Sciences	
1974-1978		Member, Naval Studies Board	
1978-1981		Member, Board on International Organizations and Programs	
1969-1973		Chairman, Physics Survey Committee	
1974-present		Member, US/USSR Working Group on Science Policy	
May-June 1979		Head, U.S. Nuclear Science Delegation to the People's Republic of China	
1981-1987		Member, U.S. National Committee for ICSU	

[redacted]

1973-1979	International Union of Pure & Applied Physics	Chairman, U.S. National Committee	Washington, D.C.
1975-1981		Vice President	
1981-1984		President-Elect	
1984-1985		President	
1948-present	American Physical Society	Member and Fellow	New York, N.Y.
1967-1971		Councillor	
1968-1972		Member, Publication Committee	
1972-present	American Academy of Arts and Sciences	Member and Fellow	Cambridge, MA.
1988-1990		Chairman, Membership Committee Physical Sciences-Class I	
1955-present	Canadian Association of Physicists	Member	Ottawa, Ontario, Canada
1979-1980	National Engineering and Science Research Council of Canada	Member, Ad Hoc Committee on Nuclear and Particle Physics	Ottawa, Ontario, Canada
1985-1986		Member, Ad Hoc Kaon Review Committee	
1975-1976	Atomic Energy Control Board of Canada	Member, TRIUMF Grants Committee	Ottawa, Ontario, Canada
1955-present	Society of Sigma Xi	Member	New Haven, CT.
1961-1962		President, Yale Chapter	
1987-1988		President-Elect (Resigned)	
1968-present	Connecticut Academy of Arts and Sciences	Fellow	New Haven, CT.
1980-present	The New York Academy of Sciences	Fellow	New York, NY
1976-present	Connecticut Academy of Science & Engineering	Founding Member	Hartford, CT.
1979-present	Royal Society of Arts	Benjamin Franklin Fellow	London, England

[redacted]

1984-1986	Electric Power Research Institute	Member, Advisory Board	Palo Alto, CA.
1987-1989		Member, Ad Hoc Advisory Committee	
1985-1986	Nuclear Power Operations Institute	Director	Atlanta, GA.
1985-1989	Southeast Universities Research Association	Director	Washington, D.C.
1982-present	Council on Foreign Relations	Member	New York, NY
1988-present	David & Lucile Packard Foundation	Chairman, Academic Fellowship Panel	Los Altos, CA.
1984-1987	Barnes Engineering Co.	Director	Stamford, CT.

[redacted] [redacted]

Answer to Question 11 - D. Allan Bromley

HONORS AND AWARDS

- a) Governor General of Canada Medal - 1948
- b) Shell Oil Fellowship - 1949
- c) NRC (Canada) Predoctoral Fellowship - 1950
- d) NRC (USA) Postdoctoral Fellowship - 1952
- e) Fellowship, American Physical Society - 1962
- f) Fellowship, Connecticut Academy of Arts and Sciences - 1968
- g) Fellowship, American Academy of Arts and Sciences - 1972
- h) Fellowship, American Association for Advancement of Science - 1974
- i) Guggenheim Fellowship - 1977-78
- j) Humboldt Foundation Prize - 1978 and 1982
- k) Benjamin Franklin Fellowship, Royal Society of Arts (London) - 1979
- l) Distinguished Alumnus Award - University of Rochester - 1985
- m) Fellowship, Brazilian Academy of Sciences - 1989
- n) National Medal of Science - 1988

HONORARY DEGREES

M.A.	(Honoris causa) 1961 Yale University, New Haven, Connecticut
Dr. Phil. Nat.	(Honoris causa) 1978 University of Frankfurt, Frankfurt, West Germany
Docteur [Physique]	(Honoris causa) 1980 University of Strasbourg, Strasbourg, France
D.Sc.	(Honoris causa) 1981 Queen's University, Kingston, Ontario, Canada
Litt. D	(Honoris causa) 1981 University of Bridgeport, Bridgeport, Connecticut
D.Sc.	(Honoris causa) 1982 University of the Witwatersrand, Union of South Africa

[redacted] [redacted]

Answer to Question 11 continued

Sc.D.	(Honoris causa) 1982 Notre Dame University, Notre Dame, Indiana
Dottore (Fisica)	(Honoris causa) 1984 University of Padua, Padua, Italy
D.H.L.	(Honoris causa) 1987 University of New Haven, New Haven, Connecticut
D.Sc.	(Honoris causa) 1988 Trinity College, Hartford, Connecticut

DR. D. ALLAN BROMLEY

PREHEARING QUESTIONS OF SENATOR HOLLINGS AND THE ANSWERS

Responsibilities and Priorities

Question: What do you consider to be the nation's most pressing science and technology issues, and what will be your highest priorities should you be confirmed as Director of the Office of Science and Technology Policy (OSTP)?

Answer: In his February 9, 1989 statement, "Building a Better America," President Bush listed a number of the nation's most pressing science and technology issues. Among them he included: the global environment and its protection the need for improved public health care and its delivery the necessity of improving American economic competitiveness the growing shortfall in American education and training -- both in quality and in quantity -- the necessity of maintaining a strong national security posture in a rapidly changing world, the challenge of maintaining American leadership in space, and the need for increased investment in basic research and in pushing out the research frontier.

Should I be confirmed as Director of the Office of Science and Technology Policy, my staff and I will devote our efforts to providing the President and, where appropriate, the Congress with the best available science and technology input to the resolution of such issues. One of my early priorities will be the preparation of the annual OSTP science and technology policy package for presentation to the President and to the Congress.

Question: Recent Presidents customarily have appointed a single individual to serve as both OSTP Director and the President's personal science and technology advisor. If you are confirmed as OSTP Director, will President Bush appoint you to the other position as well? If so, what will be your formal title, and when will that appointment become effective?

Answer: Quoting from President Bush's February 9 statement Building a Better America, "the President proposes to designate the Director of the Office of Science and Technology Policy as Assistant to the President for Science and Technology. The Assistant to the President for Science and Technology will report directly to the President and be an active member of high level interagency policy groups such as the Economic Policy Council and will also be involved with national security planning processes."

If I am confirmed as Director of OSTP, I will be sworn in simultaneously to that position and as Assistant to the President for Science and Technology.

Question: If confirmed, what do you see as your most important responsibilities? Will you play an active role in working with the Office of Management and Budget (OMB) to advise the President on budget priorities for Federal research and development R&D)? Will you participate in Economic Policy Council and National Security Council deliberations which involve questions of science and technology?

Answer: If confirmed, my most important responsibility, as a member of the President's inner circle of advisers, will be to provide him with the best available advice on both science and technology for policy and policy for science and technology. Additionally, the President has requested that "OSTP play a central role in developing and coordinating Federal science and technology strategies, and in analyzing crosscutting issues in research and development. The Assistant to the President for Science and Technology would also assist the Office of Management and Budget in developing plans for multi-year authorizations and appropriations for research and development programs...."

I have already held a series of discussions with senior OMB officials and we have agreed that OSTP and OMB staff will collaborate -- at all levels -- in developing the Presidential budget requests for future years.

As noted in my answer to the previous question, I expect to be a full-time member of the Economic Policy Council and of the Space Council and will participate in National Security Council deliberations which involve questions of science and technology.

Question: In the current period of budget constraints, the most serious problem facing the Federal R&D budget is the allocation of resources among competing demands of different fields of science and technology. The National Academies of Sciences and Engineering and the Institute of Medicine have recently recommended, in a report entitled "Federal Science and Technology Budget Priorities," that OSTP play a larger role in the formulation of the Federal R&D budget. Specifically, the report recommends that the President, with the assistance of OSTP, establish science and technology objectives which cut across the missions of various Federal R&D agencies and provide this guidance to the agencies at the time when they begin to develop their individual budget submissions. These priorities would then be incorporated in the final budget submission to Congress. Do you believe that this kind of prioritization process is feasible, and are you an advocate for instituting this budget procedure? What kinds of criteria should be used to evaluate competing big science and technology projects?

Answer: In "Building a Better America" this Administration made clear that the Assistant to the President for Science and Technology, as Director of the Office of Science and Technology Policy (OSTP), will work closely with the Office of Management and Budget in developing plans and budgets for this nation's federal R&D programs. Moreover, OSTP is expected to play a central role in developing and coordinating federal science and technology strategies and in analyzing crosscutting issues in R&D. I do intend to prioritize our R&D needs in consultation with informed members from interested communities to obtain a balanced R&D program for the nation.

I also realize that, however I prioritize these needs, there will be members of the community and, perhaps, even individual members of Congress who will disagree with these priorities. The current tight budget situation thus requires not only that the Administration, the Congress, and the science and technology communities reach a consensus on what is best for the nation and what our priorities ought to be, but also that Congress, in particular, works to sustain the long-term commitment to funding that such a program would entail.

OSTP and FCCSET

Question: The National Science and Technology Policy, Organization, and Priorities Act of 1976 allows a President to appoint up to four Senate-confirmed OSTP Associate Directors. How many Associate Directors has President Bush decided to nominate? What responsibilities will they be assigned?

Answer: President Bush has agreed to nominate four Senate confirmed Associate Directors of OSTP. My recommendations to the President will focus on bringing together four very senior, highly qualified individuals who, in addition to outstanding professional qualifications in their respective fields, will constitute a collegial group of generalists with whom I can interact closely in the formulation of policy alternatives spanning all the issues listed in my response to Question 1, as well as more specialized problems that require Presidential attention. In addition to such shared responsibilities, each of the Associate Directors will be asked to assume special policy responsibility for specific areas of science and technology, ranging from physical sciences, engineering, and life sciences to industrial technology and international science.

Question: OSTP has shrunk from 23 full-time permanent positions in the late 1970s to only 11 such positions today. This has led to a great reliance on staff borrowed from agencies and on one-year fellows; many of these temporary personnel are dedicated, but they lack broad experience. If confirmed, how many permanent staff do you intend to hire, and in which policy areas will you concentrate your staff?

Answer: In order to accomplish the ambitious task this Administration has set out for the Office of Science and Technology Policy (OSTP) to do, I believe I need a substantial staff of permanent OSTP employees. This Administration has recently sent forward to the appropriate Congressional committees an amended budget request for OSTP in FY 1990. If the Congress supports this request, which I hope it will, the amended budget request would allow for 33 permanent staff, an increase of 18 from the January Reagan Administration request. I intend to appoint highly qualified professionals in all the disciplines spanned by the tasks that OSTP has been asked by the President to undertake, ranging from the hard physical sciences to industrial technology as discussed previously in questions 1 and 5.

Question: More and more, the nation is faced with scientific and technological challenges that are too complex to be dealt with by a single Federal agency. To provide a framework for interagency policy making, the 1976 Science and Technology Act created the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET), which the OSTP Director chairs. In your judgment, how active a role should FCCSET play in coordinating interagency programs? For example, the Committee on Earth Sciences (CES) worked closely with OMB in the global change research area to coordinate agency budgets and prepare an interagency strategy. Should other FCCSET committees become as active as CES and prepare similar interagency strategies?

Answer: I have been very pleased with the success that the Committee on Earth Sciences (CES) has had in working with OMB to develop a coordinated national strategy and subsequent FY 1990 implementation plan for U.S. Global Change research. It is my intention to use this successful activity as a model for other FCCSET committees that will be assembled to address coordination of interagency strategy in other areas.

Question: To make good science and technology policy, Federal officials need scientific information that is objective, credible, and unaffected by political pressures. Unfortunately, this has not always been the case. In the debate over global change, some policy makers have chosen to misinterpret or ignore scientific results they do not like. At a May 8 hearing of the commerce Committee's Science Subcommittee, a noted NASA atmospheric scientist testified that scientific conclusions in his prepared testimony had been changed by OMB bureaucrats who wished to minimize the problem of global warming. What steps can OSTP and the OSTP Director take to ensure that political pressures do not compromise the integrity and credibility of work by Federal scientists?

Answer: I was not at the Commerce Committee's Science Subcommittee May 8 hearing and thus have no direct knowledge of this incident. But, let me give you my views on this general topic. First, I want to say that I oppose censorship in all forms. Of course, when a federal employee speaks as a Administration witness, his or her testimony is expected and should be, consistent with Administration policy. But if asked for his or her own opinion by the Committee, he or she is free to say what heor she personally believes. This approach is, I believe, consistent with the practices of this and all past Administrations, Democrat as well as Republican. Second, however, I believe all scientists have the obligation, when communicating with others not in their own field, to explain what is the consensus view and what is their own personal interpretation, when that differs from the consensus view. This is especially important when scientists speak from a public platform such as a Congressional hearing room.

Question: When Congress passed the 1976 National Science and Technology Policy, Coordination, and Priorities Act, it envisioned close communication between OSTP and Congressional committees. Relations between Congress and OSTP have been good at times, including during the late 1970s and briefly during the mid-1980s. Yet for the past several years OSTP has been late in submitting required reports to Congress and has often been uncommunicative. If confirmed, will you have a Congressional relations staff person? Do you favor regular, informal meetings between OSTP and Congressional Members and staff?

Answer: I do not expect to have a Congressional Relations Staff person. Rather, it will individually be the responsibility of appropriate OSTP staff to keep in close touch with Congress. I think that regular informal meetings between OSTP and Congressional Members and staff are an excellent idea.

Question: OSTP Directors during the Reagan Administration created and maintained a White House Science Council as a way of providing expert outside advice to the President. Does the President intend, as he suggested in one speech, to establish a similar group, perhaps a President's Council of Science and Technology Advisors?

Answer: President Bush has stated in the February 9 document, "And I will create a President's Council of Science and Technology Advisers composed of leading scientists, engineers and distinguished executives from the private sector." Shortly the President will appoint twelve outstanding individuals, and as soon as he has signed the Executive Order, that is currently in preparation, creating this Council, will invite these individuals to serve on it. As Assistant to the President for Science and Technology, President Bush has asked me to also serve as chairman of this Council of Science and Technology Advisers. The Council will have the acronym PCAST.

General Issues of Science and Technology Policy

Question: The Reagan Administration's R&D policy emphasized defense projects. From fiscal year (FY) 1980 to FY 1986, the percentage of Federal R&D dollars spent on defense rose from 50.7 percent to 69.4 percent. President Bush's FY 1990 request contains almost as high a defense number -- 65 percent of the 67.3 billion requested. Yet, since 1981 the world has changed greatly in at least three ways: East-West military tensions have declined, international economic competition increasingly is seen as the greatest challenge facing the United States, and evidence has mounted that human pollution is causing major changes in the world environment. In your judgment, how should Federal R&D policy respond to these major new trends? First, what are the R&D implications of reduced military tensions? Do you foresee less need to develop new weapons systems? Second, at a time when Japan and the European Community invest most of their government R&D funds in nondefense areas related to industrial competitiveness, should the United States continue to spend only 0.2 percent of its Federal R&D budget on industrial development? Third, is new R&D needed to give the United States new scientific understanding and technologies needed to reduce carbon dioxide and other pollutants?

Answer: In general, civilian and defense R&D are not readily comparable. About 92% of Defense R&D is for development and, especially, demonstration of specific new weapons systems, and is totally dictated by existing program plans for these new systems. Nearly all of the remainder of military R&D is for applied research directly or indirectly related to various military requirements. Very little of the Defense R&D budget constitutes basic research in the civilian sense. Reduced military tensions will, in the long term, affect defense R&D primarily through their effect on the need for future new weapons systems. There will, however, always be a vital need to be at the leading edge of technology -- whatever the future level of military tensions.

In the U.S., industrial development has historically been accomplished within the private sector, since it tends to be product or industry specific. For that reason, it is difficult to come to any direct conclusions on the adequacy of overall public and private support for industrial development by comparing federally funded percentages for industrial development between the U.S. (0.2%) with those of such countries as Japan (4.8%) or West Germany (15.3%).

The U.S. has traditionally relied on the private sector for industrial development, and this approach has generally worked well. On the other hand, the track record of federal attempts at pushing technology into the marketplace has not been very impressive. Before we commit more federal funds to industrial development we need to assess national needs and decide where those funds would provide the greatest leverage.

An increase in funding and in overall emphasis is being recommended by the Bush Administration for research on global change, notably including a better understanding and better prediction capability of the effect of carbon dioxide and other greenhouse gases on atmospheric and ocean temperatures. These recommendations are provided in the recently released Research Plan of the OSTP Committee on Earth Sciences. There will, in addition, be a continuing need for R&D on technologies helping to reduce emissions of greenhouse gases, particularly technologies promising high leverage and widespread use in the future.

Question: The United States faces a great irony. It leads the world in Nobel Prizes, but other countries excel at turning these American ideas into successful new products. It leads in science but now lags badly in many areas of technology. The Bush Administration supports a strong Federal role in science, recognizing that companies by themselves will tend to underinvest in long-term but valuable scientific research. The President has joined Congress in recommending that the National Science Foundation's (NSF) budget be doubled over five years. Yet so far the Administration has been silent about the pressing need for support of long-term technology research. If confirmed, will you recommend greater Federal support for basic technology? In particular, will you recommend increasing the budget of the major civilian technology agency, the National Institute of Standards and Technology (NIST)?

Answer: One of my highest priorities, following confirmation, will be to review our national technology policy and determine what course the Administration should follow in supporting long-term technology research. This review will include the programs now being carried out and that could be carried out by the National Institute of Standards and Technology (NIST). Support for basic technology is certainly important, but how much of that support should come from industry and how much should come from government is an issue that has to be looked at carefully.

Question: The Federal government has only limited funds to appropriate for science and technology and faces important choices about priorities and tradeoffs, In this era of hard tradeoffs, what is the justification for spending up to $6 billion on the Superconducting Super Collider (SSC), a single project that will support only a limited number of scientists and that will have no direct benefits to economic competitiveness? Would not the nation be better served if that $6 billion were spent on increased appropriations for agencies which support a far wider range of scientific and engineering research?

Answer: I would like to go on the record as being in full support of the Bush Administration request for the Superconducting Super Collider (SSC). Even in times of fiscal constraint, it is important not to abandon our vision and commitment to the future. This will be a one-of-a-kind experimental facility that will ensure continued progress in this very fundamental and important area of basic research. Not only will the SSC serve to maintain the vitality of the U.S. high energy physics community, it will also attract an international community of scientists to the U.S. to conduct their research, it will also serve as a valuable training ground for students from over 100 universities across the Nation.

I would also note that, with rare exceptions, large national projects always seem to be highly controversial, irrespective of their technical merit or the national need they would fulfill. Moreover, I do not believe it is likely that, if a given large project were not funded, the money would become available to fund other projects in the same or any other field; most often, in my experience, if the project goes away, the money vanishes too.

Question: Both Japan and the European Community provide great support for industry research projects, including consortia. While the United States need not match these projects dollar for dollar, these foreign efforts are creating formidable competitors in areas such as semiconductiors and high-definition television (HDTV). The Reagan and Bush Administrations have now provided direct funds to two industrial research consortia, the Sematech project and the National Center for Manufacturing Sciences (NCMS). In addition, the government is providing at least $30 million to help create the technology necessary for a U.S. HDTV industry. Do you personally support Federal assistance to Sematech, NCMC and HDTV research? In your judgment, what is the appropriate Federal role in supporting industry-proposed and industry-led research efforts in technologies targeted by our trading partners? And do you believe that the Department of Defense alone should aid these efforts to develop these technologies, or does the Commerce Department also have an important role to play?

Answer: Improving our national ability to compete in the international economic arena is extremely important. I view cooperation projects such as Sematech and NCMS as innovative experiments that are well worth trying. In general, I believe the government can be a partner and a facilitator but not the sole financial supporter in industry-proposed and industry-led research. It is essential that industry be involved and committed, otherwise the likelihood of commercialization is very small. As to which Department will aid these efforts and what role it will play, that has to be addressed on a case-by-case basis. Should I be confirmed, I intend to consider this and other technology policy issues in some depth and to discuss these projects with Secretary Mosbacher, among others.

Question: NSF recently predicted a shortfall of 657,000 scientists and engineers by 2006 as a result of the dip in the college-age population in the 1990s. A shortfall of some 9,000 PhD's is anticipated by 2000. The situation is aggravated by the accelerating pace of retirements from academia. By 2000, about one-third of the current faculty will have to be replaced. How serious a threat is this shortfall to U.S. leadership in science and technology? What steps do you believe that the Federal government, industry, and universities should take now to prevent such a severe shortfall in the years ahead? In particular, what steps do you believe that the Federal government can and should take in order to ensure increased participation in science and engineering by women, minorities, and the disabled?

Answer: While demographics (e.g. the number of the college-age population) will have an important effect on the number of Ph.D's, the more serious concern is the relatively low level of interest of American youth in careers in science, mathematics and engineering. Significantly, decisions about science, mathematics and engineering as careers depend largely on interests and talents that have been aroused at the precollege and even elementary level. Education is a long-term process, and it will take some time before an improvement at the precollege level shows up in increased numbers of Ph.D's. there are a number of very valuable Federal activities underway to improve science and mathematics education at all grade levels. NSF, for example, has programs for teacher enhancement and preparation, Presidential awards in science and mathematics teaching, instructional materials development, and applications of advanced technologies and research in teaching and learning. There have been numerous education success stories at the local and state level. Much can be done to draw attention to these successes, and replicate these successful experiments in other schools across America.

While overall the most effective way to foster increased participation by women and minorities in science and engineering is by improving our educational system generally, there is a continuing need for programs specifically targeting these youth. NSF, NIH and other agencies have such programs. NIH, for example, is conducting regional meetings to solicit advice for improving its ability to attract minorities to biomedical science. Most NIH education programs at the precollege level target minority groups. these programs include the Minority Access to Research Careers Program, the Minority High School Student Research Apprentice Program, the Minority Biomedical Research Support Program and others. The cumulative effect of such programs, if sustained over the long term, can have significant impact.

Question: The deplorable state of science and mathematics education in this nation threatens our future well-being. Several Federal R&D agencies, recognizing the seriousness of the problem, have instituted both precollege and university-level programs to attempt to upgrade teacher skills, develop new curricular materials, and increase the interest of young people in pursuing careers in science or engineering. However, there appears to be no overall coordination of these overlapping activities. What role should the OSTP Director play in coordinating and advocating federal programs to improve science and mathematics education? Should there be a committee of the Federal Coordinating Council for Science, Engineering and Technology focused on science education? What level of priority in the Federal R&D budget should science and mathematics education programs command? Is greater Federal support needed for undergraduate scholarships and graduate fellowships for students in science, mathematics and engineering?

Answer: For the first time in the history of this nation, and at a time when there is a more pressing need for well trained students than ever before, we are providing for our children a precollege education of lesser quality than that experienced by their parents. At the college level, since we -- alone among the developed nations -- have no centralized standards for what constitutes an adequate college education, we have not only peaks of excellence that establish international standards but also valleys of mediocrity that perpetrate effective fraud on students. On the average, however, we remain competitive with foreign college programs in terms of quality of our graduates. At the graduate education level we continue to set world standards. The flood of foreign students into our graduate schools is a measure of this reputation and indeed graduate education is one of our most important exports.

Within the constraints of the OSTP budget I shall give very high priority, if confirmed, to the appointment of an Assistant Director for Education and Social Sciences, charged, in cooperation with the Department of Education, the National Science Foundation and OMB with coordinating federal activity in science, engineering and mathematics education.

Among the early Panels that will be assembled under the PCAST there will be one charged with preparing policy recommendations on the Federal Role in Pre-College Math and Science Education. With this Panel report available I shall consider the possibility of a FCCSET Committee on Science and Mathematics Education.

President Bush has indicated on several occasions that he wishes to be known as the Education President and in our discussions has emphasized his deep interest in this area. He is committed to holding an Education Summit involving the state governors later this year, and OSTP will be very much involved in planning for the science, engineering and mathematics components of this summit. I believe that OSTP can play a catalytic role in the diffusion of a number of excellent, pioneering precollege education programs that have been developed already in a few of the states. Greater federal support is urgently needed for both under- graduate scholarships and graduate fellowships if we are to have any hope of meeting national requirements for trained personnel in scientific and technological areas.

In the 1986 White House Science Council Panel on the Health of U.S. Colleges and Universities, it was recommended that the most able one percent of the nation's high school graduates -- as determined by competitive mathematics and science examinations -- be awarded fully portable four year college scholarships at the level of $10,000 per year. The total estimated cost was roughly $120 million per year. More recently, the House Science, Space and Technology Committee has suggested a scholarship program wherein each Representative and each Senator each year selects a student from his or her district or state, respectively. In his February 9 message,

President Bush recommended establishment of a National Science Scholars Program in which one student each year would be nominated by each Member and Delegate in the House of Representatives, one by each Senator and 30 by the President, for a total of 570 annually. These scholarships being portable, should be for four years -- assuming continued excellence in performance -- and would be at a level of $10,000 per year. The cost would be $5 million in the initial year and would rise to $20 million per year by the fourth year.

These are essential programs, and I shall actively support whichever precise version the Administration and Congress decide to implement.

Question: In recent years, the Federal government has encouraged much closer ties between universities and companies. the Bayh-Doyle amendment of 1980 allow universities to keep and market the patent rights for federally-funded inventions. NSF has created university-industry centers in engineering and in science and technology. Proponents of this new policy argue that it will increase the benefits derived from taxpayer-supported research. Critics worry, however, about increased secrecy on campuses and possible conflicts of interest. In your judgment, have the new ties between universities and companies benefited the nation? Are you satisfied with the current policy?

Answer: I believe the increased ties between universities and companies have indeed benefitted the nation. The increased interaction with business further enhances the vigor and dynamics of our highly pluralistic university system. The resulting interchange of ideas and individuals provides enhanced opportunities for the training of graduate students, and in general, will make for a more competitive America. I believe we should continue to explore ways of enhancing this cooperation.

Question: A recent House hearing has once again raised the question of foreign access to taxpayer-supported university research. No one wants to cut off scientific communication, but some observers question whether American universities should actively solicit funds from foreign companies in return for special access to federally-funded science and technology. In your judgment, should Federal research grants have conditions which limit special access by foreign companies to university work?

Answer: The real issue here, it seems to me, is not whether we should restrict foreign access to university research but rather how we can encourage more access by U.S. companies. I would not place conditions on research grants, but I would work hard with domestic corporations to develop stronger ties with our research universities. This applies also to the federal laboratories where, at the moment, we find much more interest from foreign companies than from American ones.

Question: The United States has begun to redefine its science and technology relationship with other industrialized nations, both because they themselves now create important science and technology and, in some cases, because of concerns about reciprocity. Both Japan and the European Community have expanded their government-assisted R&D Programs. In your judgment, what principles should guide the U.S. science and technology relationship with other countries, and are you concerned that the United States often has given more than it has received?

Answer: First, let me say that during the period since the Second World War other countries have received more from us in the area of science and technology than we have from them. This was unavoidable, since such a large portion of the world's scientific output was (and is) American. This situation did not hold during the period before the First World War, when we imported much of our scientific knowledge and effectively turned it into technological products for mass markets.

Today the United States is still the world's leader in most of the basic sciences. Yet, just as we imported from Europe much of our senior talent before and after the Second World War, today we import a large portion of our best young scientific talent from overseas, mainly from the Pacific rim countries. Many, if not most, of these talented young people stay in the United States. Without them, our industries and universities would be in dire straits.

What principles should we follow in our science and technology relationships with other countries? The short answer is the principle of reciprocity and fairness. With our industrialized country competitors, we should seek to learn as much from them as they from us. This means we must try harder: equip our scientists and engineers with greater language skills; provide more fellowship and exchange opportunities; nurture a system that rewards our scientists and engineers for going abroad and bringing home knowledge instead of penalizing them as we tend to do now.

With developing countries, the factors in the reciprocity equation are somewhat different. We may receive less scientific knowledge from them in return for ours, but we do get intellectual talent. We should also receive, for this knowledge, foreign policy advantages, in the good sense of that phrase.

I am concerned over inequities in science and technology relationships with other nations, where they exist. We must see to it in the future that these relations are reciprocal and fair, and that they benefit both sides, not just one. With care and attention on our part, I believe this is possible.

Question: Each year, thousands of foreign nationals receive advanced degrees in science and engineering from American colleges and universities. In the past, many of them stayed in the U.S., working in our universities, our research laboratories, or in high-tech businesses. In recent years, however, greater numbers of foreign-born scientists and engineers have returned to their native countries. This so-called "reverse brain drain" is most striking in the Far East, where American-educated Koreans, Chinese, and others are going home to establish high-tech companies which end up competing with U.S. firms. Current visa restrictions make it difficult for foreign scientists and engineers to remain in the U.S. after they finish their degrees. Is this a good idea when the U.S. is facing a shortage of technically-trained people in the coming years? Should the Federal government encourage American-educated technical people to apply their talents here and not overseas?

Answer: The "brain drain" and "reverse brain drain" issues are both very important, especially when coupled with the abysmal state of science and math education at the lower levels in this country. On balance, the United States is way ahead in the brain drain sweepstakes. Because our graduate education in the sciences and engineering is so good, we attract many of the best students in the world, especially from the Pacific rim countries. Many of these very talented people stay in this country, and we gain not only the benefits of their U.S. graduate education, but also that from the 16 years or so of training received in their home countries.

The problem we have in dealing with the coming (and in some cases present) shortage of technically-trained people is not one of visa regulations. It is much more fundamental: an American educational system that produces few and poorly-trained science students for our colleges and universities. It is foolish and short-sighted to depend on foreign sources for our scientists and engineers. We must, in the long run, become self-sufficient in science and math education. To do this, attitudes among parents and students must change, and our teachers must be better trained and motivated. Science and math should be an integral part of the educational heritage of all American students, from all races, both sexes and all economic strata.

Question: Federal efforts to assess the relative strengths of American science and technology as compared with other nations appear fragmented and incomplete. The government does have several information-collection and analysis efforts, including NSF's "JTECH" program, Commerce's Japanese Technical Literature Program, and the Defense Department's Project Socrates. But there is no single, well-organized source of information on how the United States compares with others in such critical areas of technology as electronics, manufacturing, and advanced materials. What information system do you believe would be most helpful to policymakers in the Executive Branch and Congress?

Answer: As to what information system would be most helpful to policy makers in the Executive Branch and Congress, the answer is at the same time simple and complex. The simple answer is credible information derived from accurate and complete data by experts in the appropriate areas of science and technology. Data alone, no matter how accurate and complete, is of little use to policymakers in the raw, unevaluated state. They key to a successful system is, not surprisingly, first rate people who can evaluate, organize, aggregate and analyze the data. Coupled with this must be a distribution network that policy makers and their staff are aware of and understand. In other words, the successful system must be perceived as credible and, in the last analysis, driven by its users.

Government agencies, especially the Departments of State, Defense and Commerce, along with the National Science Foundation and certain other technical agencies, together with private industry, should work together (side-by-side, jointly) on this problem. A single, giant information system is not likely to be effective. A system independent of the private sector, as a source of data and as a major user of the information, will almost certainly be incomplete and sterile. Foreign countries, often in conjunction with their science and technology attache systems and in cooperation with their industrial companies and consortia, tend to be more sophisticated than we in this area of collecting foreign scientific and technical information and getting it to the important users. There are a number of good ideas around as to how we can do a better job, and should I be confirmed, I plan to look into them. I solicit the cooperation of this Committee and other committees of the Congress, along with the Executive agencies, in this effort.

Federal Agencies

Question: If East-West military tensions continue to decline and if U.S. Military forces are reduced as part of agreements between NATO and the Warsaw Pact, does fundamental research in defense science and technology become more important or less important? Does DoD need to perform more 6.1 and 6.2 research, in order to keep the long-term technological edge, or does this research become less needed?

Answer: Defense research and development is our investment in the future. We need to maintain a strong and healthy technology base, because today's commitment to defense research will be a key determinant of our ability to sustain the qualitative leadership in technologies essential to the future security of the United States and our allies. Consequently, if I am confirmed, I will work with the Secretary of Defense to ensure that the research fundamental to maintaining a strong defense technology receives adequate levels of funding, which I hope the Congress will support.

Question: The 1998 Omnibus Trade and Competitiveness Act assigned major new responsibilities to what is now NIST. What priorities do you believe NIST should pursue? What roles do you recommend for NIST's new technology extension activities and its new Advanced Technology Program? What role will you play in helping to shape future NIST budgets?

Answer: As I mentioned earlier, one of my highest priorities will be to review our national technology policy and determine what course the Administration should follow. The role of NIST will feature prominently in that review. I expect to analyze and review all agency R&D budgets as specified in the 1976 enabling legislation for OSTP.

Question: In recent years, the Federal government has not had a coherent national space policy. ambitious goals have not been matched by realistic budget requests, and no true consensus exists on future goals and programs. If confirmed, what role do you expect to play in setting national space policy? In particular, what will be your relationship with the National Space Council and with OMB? What are your personal thoughts regarding the priorities that should be pursued by the National Aeronautics and Space Administration (NASA)?

Answer: As a member of the Space Council, if confirmed as Director of OSTP, I would expect to work closely with the Council, NASA and OMB in the development of national space policies. I believe that it is very important for the President, with the advice of the Space Council and others with whom he may wish to consult, to articulate clear long-term goals for America's programs in space.

Until such time as I have had the opportunity to be more fully briefed on the existing NASA and DOD programs and plans for space-related activities, it would be inappropriate for me to comment on priorities in this area.

Question: Despite rhetorical support, initiatives to develop new technologies do not fair well in tight budgets when paired against other research and development initiatives. For example, the Civilian Space Technology Initiative and Pathfinder programs in NASA are still funded at levels below those prescribed in the original proposals. This situation leads to three questions. First, what can be done to protect technology programs that are directed to future programs and initiatives? Should a set percentage of each research agency's budget be set aside for technology initiatives much as funds are set aside for the Small Business Innovation Research Program? Second, in your opinion, what technology initiatives are required to maintain this Nation's leadership in space? Finally, to what degree should NASA follow the Defense Department example and develop new technologies which benefit the civilian economy as well as agency missions? How can such technologies be transferred in ways which benefit primarily American companies?

Answer: I would expect to work with the relevant Departments and agencies to ensure that key technology programs receive solid funding and sound program management, and I would look to the Congress and this Committee in particular for both advice and support in that regard. Rather than establishing a set percentage common to all agencies, I would favor research budgets established on a case-by-case basis in such a way to ensure the most efficient utilization of all federal resources.

This Committee has been a leading advocate of restoring U.S. leadership in space, and I share that visionary goal. I believe that access to space is key to America's leadership, including a safe and sustainable flight rate for the space shuttle and a reliable fleet of expendable launch vehicles. In the area of new aeronautics and space technologies, the National Aero-Space Plane, in particular, promises revolutionary advances in materials and propulsion for the next generation of manned space vehicles at dramatically reduced costs. In addition, as the Committee is aware, the newly formed National Space Council is reviewing a broad set of options for forward-looking space policy goals. The Assistant to the President for Science and Technology is a designated member of that Council, and I would expect to work with the Vice President and the Council membership to define technology initiatives to help restore and maintain U.S. leadership in space. Can technologies be transferred in a way to benefit primarily American Companies -- is a murky one at best. I personally have a problem answering that question since I'm not sure I know what an American Company is. For example, if we transfer technology to some ostensibly U.S. firm (say G.E., G.M., I.B.M., etc.) and the product development or manufacture is designated by that firm to occur in one of its foreign divisions (say Japan, South Korean, Taiwan, etc.) so that the expertise and skill in that area is built up outside of the U.S., is that acceptable? Should "the Government" care? Certainly we, the Government, wouldn't want to constrain our commercial sector in how it can use this transferred technology most properly. I intend as one of my top priorities to work closely with Secretary Mosbacher and his staff at the Department of Commerce to clarify and understand this and all the other issues associated with the common global business practices.

Question: Following the previous Administration, the Bush Administration has announced its commitment to double the research and education budget of the National Science Foundation by 1993. do you support that commitment? If so, what benefits do you think the nation will gain from a larger NSF program? Which areas of NSF's budget do you believe should grow the most?

Answer: Doubling of the NSF budget was one of the major recommendations of the 1986 White House Science Council report on the Health of U.S. colleges and universities and one that was accepted by President Reagan and subsequently reaffirmed by President Bush. As one of the authors of the WHSC report I remain strongly convinced that such doubling represents a wise investment in our national future.

The social rate of return on such investment in university-based fundamental research -- the dominant component of the NSF budget -- has been quantified in an as yet unpublished study by Professor Edwin Mansfield of the University of Pennsylvania. In a study of 76 private sector corporations in 7 major industry sectors, Mansfield has demonstrated a social rate of return of 28% on such investment. I consider this study to provide strong support for the recommended doubling of the NSF budget.

It is my intention, if confirmed as Director of OSTP, to work closely with the Director of NSF, with the National Science Board and with OMB to coordinate the support of science and technology across the entire federal spectrum. Such coordination would have as its goals the maintenance of balance across the science and technology enterprise in this country as well as the assurance that the funding provided by the Congress in support of the nation's R&D is used effectively and efficiently.

Pending such analysis it would be inappropriate for me to suggest priority areas within the NSF program.

Question: During the 1980s, research programs at the National Oceanic and Atmospheric Administration (NOAA) have faced budget cuts far worse than those suffered by many other Federal agencies. Yet NOAA's scientific and environmental monitoring programs play a central role in the nation's global change research program and other scientific efforts. If confirmed, what will be your recommendations concerning NOAA's research programs?

Answer: It is important to make a distinction between the research programs of NOAA (e.g. weather prediction, undersea research) and the operational programs of NOAA (i.e. fishing, weather service, ocean services, satellites). The latter category serves different agency missions from the research programs. The research programs of NOAA have continued to make significant and timely scientific contributions. It is obviously important that this research receive a level of long-term support commensurate with its contributions to scientific knowledge and to broader national needs. These national needs include a greater ability to predict weather and global change as well as address the growing and significant need to accurately understand the impact of pollutants on the oceans of this planet.

Question: At a time when U.S. imports of foreign oil are once again increasing, do you support Department of Energy R&D programs in fossil fuels, renewable energy sources, conservation, and advanced, "inherently-safe" nuclear reactors? What priorities do you believe that the nation should be following in these areas?

Answer: Although I have not yet had an opportunity to be briefed in any detail concerning the Department of Energy's R&D programs in these areas, I strongly support research efforts directed toward reduction of our national dependence on fossil fuels. Our challenge here is that of developing, eventually, a renewable, environmentally benign energy source and working through the intervening interval utilizing our existing sources with acceptable economic, environmental and social costs. We no longer have the luxury of selecting any one energy source but rather must use all those realistically available to us.

believe that nuclear fission energy can and should be an important component of our energy supply strategy during this interim period and am convinced that widespread public acceptance of it will require the demonstration of modular, inherently-safe units that can be standardized and certified once and for all and then used in whatever numbers a particular application may require.

If, for whatever reasons, we are forced to any major reduction in our use of fossil fuels, aggressive energy conservation and nuclear fission energy hold the most promise for providing adequate short-term electrical energy and aggressive biomass conversion to ethanol and methanol, equivalent promise as transportation fuel replacement.

Question: Dr. George Keyworth was perhaps the first OSTP Director to play an active role in setting policy in the biomedical area. He helped create FCCSET's Biotechnology Science Coordinating Committee, and he selected a physician as one of his Associate Directors. Other OSTP directors have been less involved in biomedical issues and the activities of the National Institutes of Health (NIH). If confirmed, what role do you expect to play in biomedical and NIH policies?

Answer: If confirmed as Director of OSTP, it is my intention to have a very experienced physician and researcher as a member of the senior OSTP staff. I view the biomedical area as a very important one for OSTP consideration and activity. As noted in my answer to Question 16, I also intend to have a senior social scientist, who will also be able to contribute effectively to biomedical policy discussions, as a member of this staff.

Specific Issues

Question: One important interagency science issue is research into global change. More than a dozen Federal agencies conduct research on global warming, ozone depletion, and other global environmental problems. If confirmed as OSTP Director, what efforts will you take to ensure that policymakers have the scientific information about global environmental change that they need to make effective policy? In your view, how well is FCCSET's Committee on Earth Sciences coordinating the Federal global change research program?

Answer: As the Director of the Office of Science and Technology Policy (OSTP) and as the Assistant to the President for Science and Technology, I intend to keep all of my colleagues in our Federal Agencies up to date on what we know and don't know about global environmental change. There will be individual briefings, meetings with Cabinet members, and larger task force groups such as the Domestic and Economic Policy Councils that we will keep informed as the information warrants. There are a great many uncertainties in our understanding of global change and that will require that policy makers throughout the government be very aware of the state of our knowledge so that the policies they formulate for the nation are consistent with the realities of our environmental condition. I would hope that the Congress would also invite me here, again, when the occasion warrants, to brief it you on what scientists believe are the important aspects of this issue.

I believe that to date the Committee on Earth Sciences, an interagency coordinating committee hosted by OSTP, has done an excellent job of bringing together all the diverse research interests important to global change into one coherent national research program. the Global Change Initiative of the Bush Administration has, however, two other important thrusts. One deals with the science and economic policy aspect, the other deals with our international response and coordination efforts. Exactly what the best structure would be for the entire initiative is not clear to me as yet, but should I be confirmed, I will make this an early priority.

Question: One major element of the Federal global change research effort is "data management," a function handled largely by NOAA and NASA. Do you agree that one of the major challenges of a comprehensive, international, global change research program is a data management program? If that is the case, why is such an insignificant amount of funding proposed for these activities? Is it not true that low funding for government activities to process, analyze, distribute, and archive data could significantly limit the nation's ability to understand the nature and effects of global change? Do you agree that data management needs should receive added attention and financial support?

Answer: Data management is certainly a key part of research in global change. Up to this point, the agencies involved, primarily NOAA and NASA, have invested funds to develop a better strategy for data management because of the unique problems in global change research. The need to handle high data rates and to link archiving with data analysis require new approaches. Funding levels in the future will reflect the need to continue planning activities and to start implementing planned improvements.

It is clear that good data management is also critically important to the success of global change research. this includes the preservation, accessibility, and continued retrievability of existing data, and the ability to store, process and intelligently interpret the enormously expanded amounts of data that will be generated over the next few decades. This function is receiving a high degree of crosscutting attention within the global change effort with the coordination of the activities of NOAA, NASA and NSF.

Question: The United States has committed to developing an international space station with our friends and allies -- Canada, Japan and the European Space Agency. Despite this commitment, this program faces serious budget difficulties on Capital Hill. What in your opinion would be the consequences of the termination of the space station program on future cooperative activities with our friends and allies? How important is international cooperation to the science and technology initiatives of the future? And what contributions from foreign partners are critical to planned and future initiatives?

Answer: (a) NASA has done an excellent job of arranging substantial foreign participation in the space station program. The international aspects of this effort are important for scientific and technological, as well as financial, considerations. Termination of the space station would have a chilling effect on other nations' confidence in the United States as a reliable partner in cooperative scientific and technology programs. Our reputation already is not the best, because of instances in the past where we unilaterally pulled out of joint projects. We as a nation do not need another demonstration of our fickle nature in the cooperative science and technology area.

(b) International cooperation on science and technology initiatives is extremely important now and in the future, especially with respect to an array of "big science" projects. Past experience shows the difficulty of dealing with these one at a time, and it is now time to consider a more comprehensive approach. Should I be confirmed, I plan to work actively with agency heads and the committees of the Congress to develop a long-range strategy, coupled with credible agreements covering a wide range of projects where appropriate. The role of this Committee in reaching a solution to this vexing problem can be especially important.

(c) The most important contributions from foreign partners relate to developing a comprehensive approach to international cooperative science and technology activities. Especially on the basic research end of the spectrum, the world's great industrialized nations must recognize the benefits of working together. This strategy makes sense for both scientific and financial reasons, and I hope to see it implemented in the years ahead.

Question: During your tenure on the White House Science Council, the Council issued a report on the health of U.S. colleges and universities entitled, "A renewed Partnership." Among other recommendations, the report called for a fund to be established within NSF to upgrade research facilities at universities. The NSF Authorization Act of 1988 created the Academic Research Facilities Modernization Program to address the problem recognized in the White House Science Council report. However, the Administration did not request funding for the NSF facilities program in the FY 1990 budget. How high a priority do you place on upgrading university research facilities? Do you believe that the NSF facilities program can be funded without cutting into planned increases for the Foundation's research and education programs? Will you recommend providing NSF facilities funds in the FY 1991 budget?

Answer: It is important that our universities have adequate research facilities for the conduct of research and the training of students. It is important, I think, that the various program officers of the federal R&D agencies trade off the importance of these needs against the research to be done. I do believe that each of these agencies should contribute, whether directly or indirectly to maintaining those universities in which they support R&D activities. It is my understanding that although NSF was authorized in 1988 to address this issue, money was not appropriated in 1989.

I would have to speak with Eric Bloch, the NSF Director, before commenting in any way on the Foundations budget, ceilings, or plans for FY 1991 and the following years. I am certainly prepared to help Dr. Bloch in any way he feels is appropriate.

Question: The White House Science Council report recommended focusing a facilities initiative in NSF rather than distributing it across several agencies "in order to minimize bureaucracy and foster uniform standards and procedures." Other observers, however, have seen certain advantages to pursuing a multiagency approach. Just as the facilities problem may be too big for the states, the Federal government, or universities to handle alone, perhaps the problem is also too big for any one federal agency to handle alone. Other agencies, particularly NASA, DOE, DoD, and NIH, contribute to and draw upon university research. Do these agencies also have a responsibility to support the modernization of university facilities, particularly those projects that would contribute to science and technology development under an agency's particular mission umbrella? Could the potential problems identified by the Council be alleviated by creating a strong, central role for the Office of Science and Technology Policy or by developing another interagency mechanism?

Answer: A number of quite independent studies of the university infrastructure problems -- legacies of more than a decade of belt-tightening and deferred maintenance -- have concluded that the universities can be brought back to a state from which they could be expected to continue thereafter in self-sufficient fashion at a cost of roughly $10 billion over the next decade. There is also general agreement on the desirability of requiring 50/50 matching of the prospective $5 billion federal funding from nonfederal sources.

In its report, the White House Science Council recommended focusing of the infrastructure initiative in a single agency -- NSF -- both to insure uniform standards and procedures and to eliminate the temptation on the part of universities to expend extensive time and effort in crafting proposals to each of the potential support agencies that might otherwise be involved. It was the WHSC belief that $5 billion spread over 10 years would not pose an intolerable institutional burden to be added to NSF, particularly in view of the fact that the funding quanta in these infrastructure proposals tend to be substantially larger than in other NSF program areas.

I believe, however, that other agencies would be expected to contribute to maintaining the universities in which they support research actively in a self-sustaining infrastructure posture by paying appropriate use charges for the facilities involved in the research. The WHSC study recommended that these use charges be based on an effective amortization lifetime of 20 years rather than the quite unrealistic 50 years currently standard.

I do not see the need for a central OSTP role here in what is essentially an implementation rather than a policy role, nor do I see the need for a new interagency mechanism. I would envisage working closely with the NSF Director in developing the necessary policy guidelines for such an infrastructure program but would not expect OSTP to be involved in its actual implementation.

Question: During the previous Administration, OSTP proposed an initiative on High Performance Computing. That initiative includes creation of a national research and education computer network, additional research in computer science and computational science, and development of advanced hardware and software. What is the status of the proposed implementation plan for this initiative? When will it be released? How important do you personally think high-performance computing is to American research and American competitiveness? How important do you believe this particular initiative is, and do you support it? In particular, do you support creation of the proposed network? Would you anticipate that the plan will be incorporated in the FY 1991 budget in the same way in which the Global Change initiative was developed in the President's FY 1990 budget?

Answer: The proposed implementation plan for the federal R&D program in high performance computing has now completed the final stage of review with the agencies and the Executive Office, and will be released very shortly. High performance computing is a cutting edge technology and has high leverage for the rest of the computing industry and for industry as a whole. In addition, demand for high performance computers is growing rapidly, and is increasingly being considered in the computing industry as an important source of new business in its own right. It would be most unwise -- potentially disabling -- to cede our historic leadership in this area to others. This initiative now titled "The Federal High Performance Computing Program" will be going out under my signature. It is the result of the contributions of many -- not the least, those of Dr.Graham, the previous Science Advisor. It will accelerate the pace of federally supported R&D in high performance computing including computer networking and will seek to stimulate continued technological and commercial leadership in this area. I believe that the day will come -- and not in the distant future -- when a national computer network will be a utility as indispensable to the functioning of our universities and industry as the telephone network is today. It behooves us to proceed with such a network in a timely way. The proposed high performance computing program is, I believe, a crucial step in the attainment of this goal.

The global change initiative, including the strategy plan, was finalized during the fall budget review for FY 1990, and succeeded because of an unprecedentedly close degree of cooperation between OSTP, OMB and a wide number of federal agencies. While the forthcoming OSTP report is clearly at an earlier stage in this process with respect to the FY 1991 budget, I anticipate that this document -- and the interagency thinking that went into it -- will be given very close consideration by the relevant agencies in the finalization of their FY 1991 budget submissions to the OMB. Moreover, I would anticipate that this document will serve as a benchmark for the detailed budgetary recommendations covering high performance computing R&D that will be made during the upcoming full budget review.

Question: The Federal government is now spending $100 million per year to support the semiconductor industry's Sematech project, with industry matching the government contribution. Do you agree with those who believe that the semiconductor industry is critical to the nation's economy? In your judgment, is Sematech a success and a wise investment? Is it a model for industry-government research collaboration in other economically strategic sectors?

Answer: The semiconductor industry is certainly critical to the nation's economy. Sematech represents a positive and creative approach. It is too early, however, to evaluate the success of Sematech. The fact that industry is involved is very significant and bodes well for the outcome of the project. Sematech may provide some guidelines for similar collaboration in other technologies, but each technology involves a unique set of circumstances, and one should not assume that what works well in one industry is transferable to another.

Question: The American Electronics Association (AEA) argues that if American companies are unable to enter and succeed in the HDTV market, this failure will have major ramifications for the nation's semiconductor and personal computer industries. In addition, Japan's state-owned NHK television network has invested an estimated $700 million to develop that country's HDTV industry, and Europe's Eureka-95 project is spending $232 million on this technology, with half of the money from government sources. AEA, therefore, recommends that the Defense Advanced Research Projects Agency (DARPA) and NIST provide Federal R&D assistance. The group also recommends low-interest loans and loan guarantees to help offset Japan's tremendous advantages in the cost of capital. Do you agree with the AEA that HDTV has important ramifications for the U.S. semiconductor and personal computer industries? Do you agree with the Association's recommendations?

Answer: HDTV undoubtedly has important ramifications for the U.S. semiconductor and personal computer industries. I am not familiar with the specifics of the AEA recommendation. However, it is Administration policy for Federal R&D agencies and laboratories to share information with industry and to participate in cooperative R&D where there are common interests. Whether or not the federal government should provide low-interest loans or loan guarantees involves economic as well as technical policy issues, and I am not prepared to comment on them at this time.

Question: In recent testimony before the Commerce Committee, Jack Kuehler, now IBM's President, noted that the Japanese are now building or plan to build 19 expensive X-ray lithography facilities for semiconductor chip production. Most experts believe that by the mid-1990s X-ray lithography will become the major method for producing ultra-dense chips (10 megabits or more). Yet there is only one such facility in the United States -- at IBM. Mr Kuehler has offered to share that facility with other, smaller U.S. firms which cannot afford to build their own X-ray installations. Some government research support might be provided. What are your recommendations concerning X-ray lithography technology? Do you agree that it is important, and do you support the IBM proposal?

Answer:I certainly agree that X-ray lithography is an important technology especially to the semiconductor industry, as such.

I am not sure exactly what Mr. Kuehler of I.B.M. proposed but I do know that if other smaller firms want to use any or all of the 20 X-ray ports at I.B.M.'s new quarter micron chip facility to conduct research on new techniques or processes, there are even now a number of agencies that probably could support this work. On the other hand if the use of the facility is for commercial products or ventures, then I doubt there is an appropriate role for the Government in such an enterprise. In any of these ventures we must be careful to ensure that the Government does not end up subsidizing particular companies. Even the Government cannot afford -- nor would it want to subsidize the entire U.S. semiconductor industry. That is tantamount to the Government picking "winners and losers".

Question: Manufacturing remains central to the American economy; even today it provides some 25 percent of U.S. jobs. Yet at a time when the United States trails Japan in manufacturing technology and operations, the total Federal civilian R&D budget for manufacturing amounts to less than $50 million per year -- one-fifth of what President Bush has requested in FY 1990 for the Superconducting Super Collider. Defense Department R&D support for manufacturing is not much higher, and Federal support for technology extension activities in manufacturing is almost nonexistent. Why does the Bush Administration place such a low priority on the nation's technology base in manufacturing?

Answer: In the past, American industry led the world in developing manufacturing Technology, and it was done with industrial money, not government money. I think one of the challenges we face is how to energize and provide incentives to American industry that will help to regain that leadership position. The federal government would never be able to afford the cost of developing manufacturing technology in every industry. Instead, Federal funding focused on university programs and generic manufacturing programs, such as the one at NIST, will have far greater leverage and broader application. Also, because of their generic nature, these activities are not likely to be funded by industry. My intended review of technology policy will certainly include consideration of this issue.

Question: Many experts believe that advanced materials, such as superconductors, ceramics and composites, are critical to our nation's future economic and strategic well-being. Recognizing their importance, Congress, in 1984, called on the President to establish the National Critical Materials Council as the focus for all Federal policy regarding critical advanced and basic materials. Unfortunately, due primarily to OMB intransigence and interference, the Council has been unable to carry out the mandate of the laws creating it. Do you agree that advanced materials are important to the nation's future and that Federal and government-industry policy in this area should be well coordinated? If so, would you advise the President to implement fully the 1984 law and support fully the National Critical Materials Council? What do you think of proposals for closer interaction between OSTP and the Council, perhaps with the OSTP Director serving as the Council's Chairman or as one of its three members?

Answer: I believe that advanced materials are important to the nation's future, and that government-industry policy in this area should be well-coordinated. It is my understanding that there have been some discussions to the effect that the OSTP Director should be serving as one of the three members of the National Critical Materials Council. I believe that the potential exists for OSTP and the Council to be closely involved in developing federal policy on critical materials.

Question: Last January, OSTP released a White House Science Council report on superconductivity policy. The report recommended the creation of two to six consortia, each consisting of one or more companies, a Federal laboratory, and a university. Two such consortia have recently organized, one based at MIT and another at Los Alamos National Laboratory. Do you agree that the Federal government should encourage and assist the creation of additional superconductivity consortia?

Answer: I am very encouraged by the formation of the new superconductivity consortia, which hold the promise of marshalling the formidable collective resources of government, industry and academia to achieve national goals. It is too early to assess whether or not additional consortia may be desirable, but I would recommend that the federal government both encourage and assist the creation of additional consortia should the national interest so dictate.

Question: Under the Reagan Administration, OSTP placed a high value on aeronautics research and technology development as evidenced by the "Bird Books" of March 1985 and February 1987 on "National Aeronautical R&D Goals." Is the Bush Administration committed to the goals and agenda that were outlined in these two reports? What role will OSTP play in this area under your leadership? Are the National Aerospace Plane and High Speed Commercial Transport still key elements of the nation's aeronautics research and technology program?

Answer: Should I be confirmed, I will be discussing the R&D budgets with all R&D agencies, including NASA. It is my understanding, however, that the National Aerospace Plane continues to be a key element of the nation's aeronautics research and technology program. It is also my understanding that the goals and agenda outlined in the "Bird Books" are consonant with the objectives of the Bush Administration. Given the importance of aeronautics research and technology development to the nation's economy, security and space leadership, I anticipate that OSTP will continue to play an active policy role in this area.

Question: During the early 1980s, OSTP and FCCSET's Biotechnology Science Coordinating Committee played a major role in developing a Federal scientific and regulatory framework for biotechnology. In recent years, however, OSTP has been less active in biotechnology matters. In your judgment, is there a need today for an active OSTP and FCCSET role in setting Federal policies regarding biotechnology research and the biotechnology industry? Do you plan any initiatives in this area?

Answer: In my judgment, there is a need today for active OSTP and FCCSET roles in the establishment of federal policies regarding biotechnology research. There may well also be roles for OSTP in consultation with FDA, NIH, and the Department of Commerce in formulating policies that are relevant to the biotechnology industry, but there are many aspects of this industry that fall outside the purview of OSTP.

I would anticipate that the FCCSET Biotechnology Science Coordinating Committee would play a continuing active role in coordinating R&D activity in this rapidly growing, rapidly changing and increasingly important field.

Question: In a 1987 lecture at the University of Virginia entitled, "The Presidency and Science Advising," you expressed the view that in many important science and technology issues associated with public policy decisions, the key unknowns are the behavioral, social, and economic consequences of various possible courses of action. This tends to argue for participation by behavioral and social scientists on Presidential scientific advisory committees. However, in the past, representation of behavioral and social scientists on such advisory bodies has been low to nonexistent. Do you intend to have more representation by specialists in these fields at OSTP, and will you recommend that Presidential science advisory panel?

Answer: I believe that the social sciences have an important contribution to make in science and technology policy overall, and I will ensure that appropriate attention is given to those fields of inquiry in the work and the staffing of OSTP and of scientific advisory panels under my purview.

Question: In December 1987, the General Assembly of the United Nations voted to establish an International Decade for Natural Disaster Reduction (IDNDR) beginning in 1990. The goal of the International Decade is to promote cooperative efforts to reduce the ravages of all types of natural hazards, including floods, earthquakes, severe storms, insect infestations, and wildfires. Clearly this effort could involve a number of Federal agencies, including the Office of Foreign Disaster Assistance, the Federal Emergency Management Agency, NOAA, NASA, and the United States Geological Survey. How important is this effort to the Administration? What role do you expect OSTP to play in support of the IDNDR? Will there be increased focus on natural hazards reduction in the years ahead?

Answer: One of the objectives of the President's foreign assistance program is to support international disaster relief and mitigation efforts on both a bilateral and a multilateral basis. The INDR is one such effort. To the extent that science and technology policy may contribute to the President's foreign aid objectives, I would expect to work with the Secretary of State, the Administrator of the Agency for International Development, the U.S. Permanent Representative to the United Nations, as well as other interested departments and agencies, to support the President's humanitarian goals.

Question: In recent years, the Commerce Committee has heard complaints from American researchers about fluctuations in research funding levels. Of course, most researchers would like more funding for their fields of study, but understand the need to control Federal spending and reduce the deficit. What concerns them are unpredictable swings in funding levels from year to year, or even month to month. Most research programs require steady, long-term funding, yet the chances of obtaining grant renewals or completing research projects can fluctuate greatly. This unpredictability disrupts research, hurts morale and performance, and leads researchers to spend more and more time writing and peer reviewing grant proposals. Can efforts be made to provide researchers with more constant funding? In recent years, NIH has moved increasingly to two- and three-year research grants. Do other research agencies intend to follow the NIH's lead?

Answer: As I understand it, the Reagan Administration tried a number of times to get Congress to authorize and appropriate funds for R&D programs on a multi-year basis. Each time the effort was defeated. I also would like to provide stability on a two to three year basis for researchers, particularly for the "small" Principle Investigator-type groups in universities. I think entirely too much of these people's time - on a yearly basis - is taken up with writing proposals to ensure that "next year's" money is secured. However, for this system to work, Congress must also appropriate on a multiyear basis. Otherwise previous investigations would still have to base the annual uncertainties of "availability of funds".

I should also add that I would not generally approve of long-term funded contracts of more than two to three years since I also believe that simply doing research should not guarantee research funding. A cruel fact of life is that at any time new, more exciting and significant research breakthroughs occur and funding for less significant research must recede and receive less funding in order to free up resources. This is absolutely necessary if our overall national R&D effort is to remain vigorous and at the state-of-the-art.

Question: The peer review process has come under fire in recent years from researchers and universities that view it as a "good old boys' club" which distributes research funding to a small circle of research universities. Proposals have been made to spread research funding more widely, even if it means bypassing the traditional peer review process. How do you view the traditional peer review process for distributing research grants? Are there specific problems with peer review that need to be addressed?

Answer: The United States is unique among the developed nations in its firm belief that research and education are inextricably linked and synergistic. But it bears emphasis that research and education are nonetheless quite separate entities, particularly in smaller educational institutions.

In supporting university research, the U.S. federal government has been guided since 1946 by policies originally formulated within ONR. These policies have resulted in a research and technology enterprise, that although it is no longer preeminent in every aspect of science and technology, remains overall the envy of the world. This ONR policy had as its foundation the support of the nation's most able researchers selected by peer review. It is neither accident nor the result of any perversion of the peer review concept that research funding distributed under such policies is concentrated in a relatively small fraction of the nation's educational institutions.

Excellence attracts excellence and successful research in almost every field of science and technology requires the stimulation of continuing contact with able colleagues. The nation's most able scientists and engineers are simply not uniformly spread among its educational institutions, and if our goal is the best possible research per dollar invested, then research support will inevitably be concentrated on the concentrations of able researchers.

At the same time, however, it bears emphasis that something approaching 75% of American youth attend college within 50 miles of their birthplace. For that reason alone, it is essential that high quality educational opportunities be provided on a geographically distributed basis.

Recognizing these two distinct aspects, it becomes essential to focus separately on the nation's research universities and on its smaller, less research-intensive universities and colleges.

Since World War II, we in the U.S. have been providing federal support to higher education indirectly through grants and contracts in support of research, and we have not faced up to the fact that these were, in fact, supporting substantial educational activities. In consequence, because research was the operational justification for the support, that support tended to be attracted by excellence in research and not necessarily by excellence in education.

It is time that we specifically recognized the need for a federal role in the provision of excellent educational opportunities throughout the nation, quite apart from the need for federal support of university research. If confirmed, I would intend to request that a PCAST Panel study and report on appropriate mechanisms for such support of educational excellence in the nonresearch intensive universities and colleges.

Despite the noted concerns regarding peer review, I am inclined to adapt the Churchillian comment concerning democracy as a form of government -- peer review is the worst possible mechanism for the distribution of federal research support -- except for any of the other approaches that have thus far been proposed!

STATEMENT OF D. ALLAN BROMLEY

Dr. **Bromley**. Thank you, Mr. Chairman and members of the Committee. I am both pleased and honored to appear before you this morning as the nominee for the directorship of the Office of Science and Technology Policy in the Executive Office of the President.

My biography and written statement have been provided to the Committee, and, with your permission, Mr. Chairman, I would ask that they be made part of the record.

Senator **Gore**. Without objection, we will do that.

Dr. **Bromley**. In the interest of time, what I shall simply highlight, briefly, some of the points made in that statement.

Since the time of its formation, OSTP has played an important role nationally, not only in bringing science and technology to bear on problems and opportunities of national significance, but also in maintaining the Nation's science and technology base in a healthy, productive state.

Indeed, it bears emphasis that the present U.S. science and technology enterprise, reflecting generous support over the years from the Congress, and ultimately from the taxpayer, is the strongest that the world has ever seen.

At the same time, however, other nations, by focusing their resources, have moved up to equal us in some areas, and indeed in some areas, to move ahead of us. This resurgence of scientific and technical strength elsewhere, while not unexpected, emphasizes that we cannot continue to take our leadership in science and technology for granted.

In his February 9th budget message, President Bush called on OSTP, and I quote, "to play a central role in developing and coordinating federal science and technology strategies and in analyzing cross-cutting issues in research and development."

This is an awesome responsibility, particularly at a time when science and technology are changing at an unprecedented and an accelerating rate. And paradoxically, at a time when, more than ever before, we have to take a longer view of where we are going as a nation in science and technology.

And, Mr. Chairman, gentlemen, if I am confirmed as director of OSTP, one of my very highest priorities will be providing what I consider to be that absolutely essential coordination.

I do not intend to be a lobbyist for the science and technology communities. Rather, my intention is that the best scientific and technical judgment from those communities will be made an integral part of the policy deliberations and decisions of this Administration.

If confirmed, it is also my intention, Mr. Chairman, to emphasize, considerably more than in the past, the T part of OSTP-Technology. Specifically, I shall attempt to add to my staff one or more senior research and development executives from the private sector and, in close collaboration with the newly-created Under Secretary of Commerce for Technology, between us, develop better coordination of federal activities in support of engineering and technological R&D, as well as a catalysis, if you will, of the growth of current, rather isolated, but still very important and pioneering state and regional industrial technology initiatives.

The issues that confront us on the national science and technology agenda, are complex and interrelated. In my written statement, I have gone over in some detail, Mr. Chairman, the issues that I feel are most important that confront us.

It seems to me that these issues fall naturally into two groups. First, cross-cutting issues; and second, programmatic issues. Cross-cutting issues include environment and ecology, economic competitiveness, education and training, information science and technology, and indeed, the science and technology base.

Even though science and technology may not be the dominant components in some of these, it is certainly true that science and technology are critical components of all of them.

For example, science and technology are intimately related to the health of our environment, both local and global, and with the preservation of our ecological heritage.

Programmatic issues, on the other hand, Mr. Chairman, include those of national security, energy utilization and supply, public health, international science and space.

To take a specific example. The space station, while a national project, obviously has very important international components as well. As President Bush made clear only yesterday, our space program will be systematically laying down the infrastructure for a permanent human presence and for continuing exploration beyond the bonds of Earth; ultimately, beyond the solar system.

And because it is obvious that no single individual can hope to address the enormous breadth of scientific and technological issues that demand Presidential attention, with expertise in all, should I be confirmed, one of my highest priorities will be that of bringing aboard the four Presidentially-appointed, Senate-confirmed, Associate Directors called for in the 1976 law establishing OSTP.

While my goal here is that of attracting outstanding individuals in their own areas, with broad experience, expertise and recognition, it is even more that of bringing together a group of individuals who, with their supporting staffs, can interact cooperatively to address—from a generalist point of view—the issues that arise for Presidential decision and for Presidential action.

This group will also maintain a watchful overview that can provide early warning and, where appropriate, recommendations for specific actions concerning those science and technology developments that have the potential of becoming important Presidential issues. And drawing on the resources available both within and outside of OSTP, and the new Council of Science and Technology Advisors that President Bush is currently assembling, it will be my responsibility, shared by my senior colleagues, to ensure that the best judgments that science and technology can provide are available at all times to the President, to the various arms of the Executive Office of the President and, where appropriate, to the Congress.

At the same time, it will be our responsibility, shared in particular with OMB and with Congressional staff, to ensure the coordination of federal activities in science and technology and cross-cutting analyses of their effectiveness and responsiveness to Presidential and Congressional intent; to ensure that the resources that you in the Congress make available to these activities are utilized as effectively and as efficiently as is possible.

And finally, Mr. Chairman, the national agenda that I have outlined in my written statement presents a wealth of opportunities and challenges. It is with no little humility, but with great confidence, that by working together we can make this a stronger and better nation, that this morning, I ask you for your confirmation as Director of the Office of Science and Technology Policy.

[The statement follows:]

STATEMENT

by

D. ALLAN BROMLEY

Director - designate

Office of Science and Technology Policy

Executive Office of the President

Mr. Chairman and members of the Committee, I am pleased and honored to come before you as the nominee for the Directorship of the Office of Science and Technology Policy (OSTP) in the Executive Office of the President. My biographic and publication data have been forwarded to the Committee and I would ask, Mr. Chairman, that they be made part of the record.

The Office of Science and Technology Policy was created by the 94th Congress through Public Law 94-262, the National Science and Technology Policy, Organization and Priorities Act of 1976, recognizing, "the profound impact of science and technology on society and the introduction of scientific technological, economic, social, political and institutional factors."

Responding both to the President and to the Congress, OSTP has played an important role nationally not only in bringing science and technology to bear on problems and opportunities of national significance but also in working to maintain the nation's science and technology base in a healthy and productive state. Indeed it bears emphasis that the present US science and technology enterprise, reflecting generous support over the years from the Congress—and ultimately from the taxpayers—remains the strongest, by far, that the world has ever seen. At the same time, however, other nations, by focusing their efforts into particular areas, have moved up to equal us and, in some cases, to move ahead of us. This resurgence of scientific and technical strength elsewhere, while expected, emphasizes that we cannot take our leadership role for granted.

Leadership in science and technology is important to this country not just as a source of national prestige, but for the most pragmatic reasons of national policy; developments in science and technology have a profound effect on national destinies. But change is the hallmark of our age; and nowhere is that change more striking than in science and technology. It was only about 100 years ago, for example, that Herz demonstrated the reality of electromagnetic waves, the basis for modern telecommunication, computing, radio and television and much other modern technology. It has been only about 75 years since Rutherford discovered the atomic nucleus and Onnes discovered superconductivity; and just about 50 years since Whittle invented the jet engine, Aitken began building the first electronic digital computer, and Avery discovered that the DNA molecule carries the blueprint for life itself.

Discoveries such as these have changed our view of the universe and of our place in it. Because of these discoveries, and others like them, science and technology now permeate the entire fabric of our society and the lives of our citizens—from national security and health to economic competitiveness, from entertainment to the exploration of space and to continuing adventures in research on the edge of the unknown.

In his February 9, 1989 budget message, President Bush called on OSTP to "play a central role in developing and coordinating federal science and technology strategies and in analyzing crosscutting issues in research and development." This is an awesome responsibility at a time when science and technology—and their applications—are changing at such an unprecedented and accelerating rate and, paradoxically, when it is ever more important to take a longer range view of where we are going than has often been the case in the past.

It is already clear that a major strength of many of our friendly competitors lies in their ability to maintain a longer range perspective in business, in academic institutions and in government than we do. We need to develop a longer range strategic vision of science and technology and of their present and potential contributions to our economic well-being, our national security, and to the health and quality of life of our citizens. If confirmed, I shall devote a substantial fraction of the time and resources of OSTP to the development of such longer range strategies and their implementation.

If confirmed, it is also my intention to focus substantially more attention on the T in OSTP than has been the case previously. Specifically, I shall attempt to add one or more senior, experienced, research and development executives from the private sector to the OSTP staff to foster, in close collaboration with the newly created Under Secretary of Commerce for Technology, better coordination of federal activities in support of engineering and technology R & D as well as catalysis of the growth of current, pioneering, state and regional industrial technology initiatives.

Without in any way attempting to be inclusive, and without for a moment suggesting that any one-dimensional listing such as this conveys any realistic priority message, let me only remind you of some of the major items in our present national science and technology agenda. There are disturbing trends—but in almost all cases these same trends carry the seeds of opportunity if we are wise enough to recognize and act on them.

THE NATIONAL AGENDA INVOLVING SCIENCE AND TECHNOLOGY

Although each of the following topics is, to some extent, related to all others, for convenience I am grouping them in a few categories:

a) **Environment and Ecology** Science and technology are intimately related to the health of our environment—both local and global—and with the preservation of our ecological heritage. Knowledge and its wise use are keys to our future. There is public concern, both nationally and internationally, about planetary environment and global change, the availability of clean air and clean water, the pollution of the earth's oceans, the long-term challenges of hazardous waste disposal, ozone problems both near the earth's surface and far above it, the possibility of a greenhouse warming and the possibility of environmental release of genetically engineered bacteria, plants and animals. All these concerns have served to focus attention on the state of our knowledge of both the sciences and the technologies involved. These concerns also raise the need for new knowledge, to help us better understand these phenomena, and innovative new strategies and technologies to cope with them and, to the extent possible, prevent them. The opportunities are many.

Of particular importance in future years is the question of ocean pollution. Our oceans function as the inevitable repository of much of the pollutants carried by our atmosphere, rivers and land masses. Although the oceans have a substantial, though finite, capacity for self-cleansing through biological and chemical intermediate pathways we do not yet understand these pathways in any detail nor can we predict how different pollutants behave. If our pollutant deposition rate exceeds the self-cleansing potential of the oceans for any significant period, the consequences for all mankind could be profoundly negative. This is only a single example of our vital need for more aggressive, sustained research on the complex, difficult questions that underlie our global ecology and environment.

Greater attention must also be focused on an irreplaceable human heritage—the planetary gene pool—that is rapidly being destroyed together with the tropical rain forests and other unique ecosystems that support it. We have only begun to appreciate the importance of biodiversity to our long-term future as a species. But these concerns require a long-term perspective on the health of our environment. Whether we are considering the release of pollutants into the oceans and atmosphere, the storage and disposal of hazardous wastes, or the preservation of biodiversity, we must develop approaches and technologies that will work indefinitely, and result in viable steady-state solutions. If we fail in this, we inevitably undermine the very conditions that make a technological civilization possible. Science and technology can play important roles in improving our stewardship of Spaceship Earth while providing for the well-being of all its inhabitants.

b) **Public Health** Health and improved quality of life are universal aspirations. New insights that can come only from basic biomedical research are needed in cancer, heart disease, dementias, and neurological disorders. Cell and molecular biology, virology, and human genome research hold particular promise. The neurosciences are contributing new insights into how the brain performs its remarkable functions. The scourge of AIDS, the drug problem, burgeoning costs of medical care, and health problems associated with an aging population all raise additional challenges in biomedical science. There are counter-challenges in terms of associated ethical and legal issues—public concerns about the use of animals in medical research, about genetic engineering, scientific misconduct, and clinical trials of new drugs. Prevention strategies need particular emphasis, including dietary measures, reductions of smoking and alcohol consumption, and accelerated vaccine development. The biotechnology industry, in which the U.S. has a substantial lead, continues to expand; it was spawned primarily from U.S. government-supported research in genetics and immunology. Biotechnology is leading to new products in health care, agriculture, and industry. Close attention must be paid to the regulatory environment of these new products, and to incentives that foster technology transfer into U.S. industries.

c) **Economic Competitiveness** A healthy and productive national economy is fundamental to all else that we do. Increasingly it is our know-how that constitutes our edge in an increasingly competitive global market. But to respond successfully to growing pressure from international competitors, we must continue to innovate at a rapid rate. That in turn means both continued investment in research and development, by both the federal and private sectors, and the development of policies and mechanisms to insure the rapid application of research discoveries and the maintainance of a healthy science base. We are unique among the developed nations, for example, in the demands that our private sector make upon our colleges and universities both for new fundamental knowledge and for the young minds trained to use it creatively. But after more than a decade of belt tightening, when even more than ever before is being demanded of them, these institutions find themselves with decaying infrastructures, obsolete equipment and growing shortages of both faculty and students in many important areas. These are problems that we can only ignore at our peril.

Increasingly, we will find it essential to include international as well as national considerations in our strategic economic planning; and increasingly our competitiveness will depend upon our success in harmonizing our federal regulations not only across our own federal agencies but also with our European and Pacific Basin trading partners. We will also find that retaining and further enhancing our science and technology leadership will allow for the effective U.S. support of less developed nations in their quest for development within the evolving international economic structure and without significant adverse impact on the global environment.

While science and technology are only two elements of economic competitiveness, they are crucial ones. The long-term economic health of this nation requires a strong manufacturing and technological base, as well as continued excellence in basic research. For this reason we must foster the retention, growth—and in some cases the reestablishment—of critical technologies, within our borders. Central to this approach is the development of new opportunites and forums for collaboration among businesses, and between our private and public sectors. While the knowledge base, and the capitalization required for economic expansion will continue to reside predominately within the private sector, the federal government can provide a crucial role as catalyst in our future growth.

d) **Education and Training** After leading the world for decades in the quality and scope of the education provided to our youth we are now falling far behind the rest of the developed world. The state of our precollege education can only be considered as scandalous; at the college level, despite wide variations in quality, we remain—on average—competitive; at the graduate level we continue to set the standards for world activity. But we achieve this paradoxical progression only by dropping, along the way, a very large fraction of our young people, particularly minorities and, in science and technology, women—a loss that this nation simply can no longer afford.

The average time from the junior year in high school until completion of graduate study in this country is about 10 years; moreover the educational pipeline is a remarkably stable one so that a lead time of 10 years is required to make any significant change in the output of trained professionals. NSF surveys have already identified major shortages amounting to more than 100,000 computer scientists per year in the early 1990's and to corresponding shortages in the 35,000 to 50,000 range in many fields of engineering. There are corresponding shortages in biomedical science, in biotechnology and in the number of physicians who are committed to careers in research.

Because a very large fraction of scientists and engineers make their career decisions during and **before** high school—much earlier than is typical of other professions—it is essential that we refocus our corrective efforts on a much earlier phase of the educational enterprise than in the past if we are to increase our production of professionals in science and engineering. Currently, at these important precollege levels, the quality of mathematics and science teaching is often too low to attract other than the most dedicated student. For these dedicated few, in many cases, both the quality and quantity of mathematics and science exposure are too low to prepare them adequately for careers in these fields. These problems are increasingly recognized and a number of states have made important strides toward improvement in their K-12 educational programs. But much remains to be done.

The federal government can play a vital role in the critical precollege arena by fostering and catalyzing the spread of the important new interactions in curriculum development, teaching methods, and teacher preparation developed in, thus far, isolated state and local areas.

It bears emphasis that our graduate education, because of its internationally perceived excellence, remains one of our most important exports and that scientists and engineers educated here, on return to their home countries, establish and maintain communication channels—individual to individual and institution to institution—that are a vital part of our foreign relations as well as integral parts of the international science network. The fact that more than 50% of the advanced degrees in engineering in recent years were awarded to foreign students does **not** imply that we have too many foreign students; rather, it highlights the fact that we have too few American ones.

e) **National Security** For decades following World War II, the Department of Defense, having originated mechanisms for federal support of academic research that remain the envy of the world, was the dominant supporter of both fundamental and applied research in this country. But now, when weapons and communications systems of rapidly increasing complexity and sophistication are more essential than ever before to our national security, the Defense Department no longer enjoys the easy communication, access to the latest research results, and to the brightest students that characterized their relationship during the earlier days; nor is the excellent science and technology developed within the Defense Department's own laboratories finding its way into the private sector as quickly and effectively as was once the case.

National security strategies are more and more conditioned by science and technology. From intelligence gathering to communications and control, from weaponry of exquisite precision to the health and safety of our military personnel, growing complexity and technical sophistication are the hallmarks of our modern services. The Office of Science and Technology Policy will cooperate with the National Security Council, the Department of Defense, and the Office of Management and Budget to be sure that the nation gets maximum effectiveness for its defense expenditures.

As one of the largest training organizations in this country, one of the largest producers of new technologies, and one of the largest employers of scientifically and technologically literate citizens, the Defense Department is increasingly dependent upon the same shrinking pool of young people that supplies both scientific and engineering talent and high tech technicians of all kinds. And although the Department of Defense has the largest R & D budget in the federal government, a close inspection of those expenditures shows that they are really Research, Development, and Demonstration—with the lion's share of the money in Development and Demonstration of specific weapons systems. Actual support of research within DOD is relatively small, and may need more emphasis if we are to preserve a decisive edge in the offensive and defensive systems of the future. In these and other ways, one of the major challenges we face is that of reintegrating our national security enterprise into the civilian educational and research system—to the benefit of both.

f) **Space** America's role on the last great frontier has suffered in the post-Apollo period from public apathy and from the lack of a clearly defined and clearly articulated set of long range national goals. Where are we going beyond earth orbit—and when? The new windows on our universe that have been opened in our space program have already yielded a treasure trove of new understanding and economic benefits. And it bears emphasis that the giant leap in American science and technology resulting from the early days of the space program through the Apollo flights was the only such leap in our history that did not require the stimulus of a major military conflict.

An even greater flowering of new science and new technologies, with their attendant economic benefits, awaits a new aggressive American move into space. OSTP will cooperate closely with the Space Council as it reviews and guides our national space policy.

From its founding days, this nation has always accepted the challenge of a new frontier. The spirit of Lewis and Clark—the spirit of adventure and exploration—is still very much a part of America. I suspect that Lewis and Clark would envy us as we stand on the threshold of the ultimate and endless frontier—as we prepare to break the bonds of Earth.

g) **Energy Utilization and Supply** Energy is the ultimate resource. With abundant energy we can recycle the elements of the earth's crust indefinitely, desalinate sea water or pump it from underground aquifers to obtain vast amounts of pure water, fix nitrogen from the air and liberate phosphorus from the rocks to maintain a strong agricultural and industrial economy indefinitely. But as noted above, almost all energy is produced and used at significant environmental cost. Both for this reason and because our fossil energy reserves are intrinsically limited, energy conservation must play a greater role in future energy planning. This is particularly true in industrial process technology.

The challenge here is that of developing an inexhaustible and more environmentally benign source of energy while working our way through the intervening period, until it becomes available, by utilizing our present sources of energy with acceptable environmental and economic consequences. Aggressive research on alternative energy sources, including intrinsically safe nuclear fission reactors, is clearly required.

h) **Information Science and Technology** The Industrial Revolution, in much less than a century, by augmenting the power of man's muscles, changed the face of society; so also will the present Computer Revolution in augmenting the power of man's mind. The past decade has witnessed spectacular increase in the volume of information generated, communicated, processed and used by humans, by machines, and by organizations involving both. Internationally, there are over 1700 separate entities that maintain at least one database but reflecting individual initiatives and the lack of any agreed-upon standards these span a wide variety of systems, services, command languages, protocols and terminologies. We are fast approaching a level of electronic chaos that will limit sharply the utility of these resources. The U.S. should take the lead in negotiating and promulgating standards for electronic information handling.

Keeping pace with this flood of information and using it creatively demand evermore powerful supercomputers linked with broad-band national and international communication networks. Such networks can revolutionize not only the conduct of scientific and technological research but also the speed and effectiveness with which the results of such research can be integrated into all sectors of our society—manufacturing, education, health care, defense and entertainment among them. Currently in this country alone more than 600 individual networks incorporating more than 100,000 computers and workstations are linked by INTERNET and one of its major components, NSFNET, links over 250 major educational and research establishments.

i) **Science and Technology Base** The development and maintenance of our science and technology base is one of the surest investments in our national future. A recent, as yet unpublished, economic study of 76 major American corporations in 7 industrial sectors, has demonstrated, for the first time, that the average social rate of return on investment in academic (basic) science and technology is about 28 percent. We have made progress during the Reagan years in strengthening our science and technology base. The budget of the National Institutes of Health has doubled over the past seven years and President Bush has reaffirmed President Reagan's announced national goal of doubling that of the National Science Foundation by 1993. But a substantial part of the growth in NIH funding was compensatory for loss of purchasing power during the prior five year period and over the past decade civilian R&D funding has remained essentially constant at 1.8% of the Gross National Product. Experience from our response in the 1960's to Sputnik in the education and research communities, however, demonstrates that what is required here is steady, **predictable** growth rather than sporadic response to perceived emergencies or crisis situations. I support the 5 year authorization and 2 year appropriations cycles proposed by President Bush because these longer time horizons, together with decreased red tape in the federal agencies, can reduce, dramatically, the lost time now taken from research and teaching activities by academic faculty—and most particularly by its youngest and, most creative members—in their annual searches for funding and in satisfying subsequent federal grant reporting requirements. (In 1986, a White House Science Council study found that young U.S. faculty members in science and engineering spent, on average, some 30% of their available time in such activities.)

Maintenance of the science and technology base, moreover involves both new knowledge **and** trained professionals at all levels. As noted above, we still produce extremely well-trained Ph.D. level personnel, although in much too small numbers. However, at the bachelor, associate and high school graduate levels our output falls far below our national requirements **both** in quantity and in quality.

j) **Balance** A growing area of concern is that of maintaining a healthy science and technology base with an appropriate balance between the support of the large megaproject (i.e. big science) that typically attracts broad media and public attention and that of the individual, or the small groups of researchers (i.e. small science), working in relative obscurity but still constituting the backbone of the U.S. scientific and technological enterprise.

It is all too easy, once a megaproject—important as it may be—is underway, for its momentum, particularly in times of overall financial stringency, to sweep up substantial fractions of the funding that had been allocated to smaller activities and projects, both in the host agency of the megaproject and in other agencies as well. It is essential that in our long range planning for the implementation of megaprojects that we act to protect small science and maintain a healthy balance across our scientific and technological activities.

k) **International Science** A number of the megaprojects currently under consideration, such as the Superconducting-Supercollider, the Space Station, and the Human Genome Project are unique and will be of world class. As such, it has been natural for us to seek and encourage international participation in these projects. Here again, such cooperation builds communication bridges valuable far beyond confines of the science and technology involved. We need a comprehensive approach to such international scientific cooperation that can become an integral part of our foreign relations activities. Further, we should improve our ability, as a government, to utilize science and technology explicitly as a tool in attaining the goals of U.S. foreign policy.

THE ROLE OF THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY

The above agenda divides naturally into two quite different categories—both under OSTP purview: (1) science and technology for policy; and (2) policy for science and technology. The first recognizes that science and technology are vital components of the broad range of foreign and domestic issues facing us today; the second recognizes the continuing need for a coherent and inclusive national science and technology policy—one which preserves the dynamism and pluralism of our science and technology enterprise and at the same time, one which fosters a close and mutually beneficial collaboration between state and federal government, academia and the private sector. In both categories, close, harmonious working relationships between OSTP staff and those of other Executive Branch Offices—at all levels—and between OSTP staff and Congressional staff—at all levels—are essential. I shall give high priority, should I be confirmed, to developing such relationships. For example, detailed discussions aimed at establishing a close working relationship between OSTP and the Office of Management and Budget (OMB) at all stages of preparation of future Presidential budgets are already in progress.

Equally important are relationships between OSTP and the scientific and technological communities in the private sector, national laboratory and academic settings. OSTP can play an important role in communication and consensus building with reference to both long and short range strategies. But there must be no misunderstanding. OSTP cannot—and will not—function as a representative or lobbying organization for these communities. Were this to happen—or even be perceived to happen—OSTP's effectiveness would be largely lost.

President Bush, in his February 9 message, proposed to designate the Director of OSTP, once confirmed, as Assistant to the President for Science and Technology and subsequently has requested that he also chair a new, broadly-based, President's Council of Science and Technology Advisers, "comprising leading scientists, engineers, and distinguished executives from the private sector."

This Council will provide a very important bridge between the scientific and technological communities and the Executive Office of the President, an additional channel for expert and objective advice and counsel, and an involved group of distinguished citizens prepared to devote substantial time and effort (both as a Council of the whole, and through **ad hoc** panels chaired by Council members that draw upon members of the community involved having special expertise relating to the topics at issue) to discussing, researching, and refining Presidential initiatives involving scientific and technological content and policies.

Because it is obvious that no single individual can hope to address the enormous breadth of scientific and technological issues that demand Presidential attention with expertise in all, if I am confirmed, one of my highest priorities as Director of OSTP will be that of bringing on board the four Presidentially appointed and Senate confirmed Associate Directors called for in the 1976 law establishing OSTP. While my goal is that of attracting outstanding individuals with broad experience, expertise and recognition in their respective areas, it is even more that of bringing together a group of individuals who, with their supporting staffs, will constitute a collegial group of generalists prepared to address, cooperatively, the issues involving science and technology that have risen to Presidential level. This group will also maintain a watchful overview that can provide early warning and, where necessary, recommendations for appropriate action concerning new science and technology related developments that have the potential of becoming such issues.

It again bears emphasis, however, that I, and all the members of the Council and the OSTP staff are very much aware of the fact that scientific and technological issues generally represent only one term in the policy equation. Considerations entirely outside of science and technology—political, international, economic and others—may well be the dominant and decisive ones. Scientific and technological knowledge is a necessary, but far from sufficient, input in the development of optimal national policies.

Even more than in the case of OSTP noted above, I view my own role, if confirmed, as being that of a trusted member of the President's inner circle of advisors—**not** a spokesman for the scientific and technological communities. The Assistant to the President for Science and Technology should be someone aware both of the potential importance and relevance of scientific or technological considerations to policy under discussion and to the potential impact of such policies on science and technology.

Drawing on the resources available both within, and outside, of OSTP and the Council of Science and Technology Advisers it will be my responsibility, shared by my senior OSTP colleagues, to insure that the best judgments that science and technology can provide are available at all times to the President, to the various arms of the Executive Office of the President and, where appropriate, to the Congress. At the same time it will be our responsibility, shared in particular with OMB and with Congressional staff, to insure, through coordination of federal activities in science and technology and cross cutting analyses of their effectiveness and responsiveness to Presidential and Congressional intent, that the resources that the Congress makes available to these activities are utilized as effectively and efficiently as possible.

The national agenda that I have outlined above presents a wealth of opportunities and challenges. Our success in responding to them will depend upon mobilization of our best talent and our best ideas; it will require that we be prepared to try new approaches; and above all, it will require that my associates and I must be prepared to listen. We need good ideas—from whatever source—and we **are** prepared to listen.

It is with no little humility, but with great confidence that by working together we **can** make this a stronger, better nation, that I ask for your confirmation as Director of the Office of Science and Technology Policy.

This ends my prepared statement, Mr. Chairman and I should be happy to respond to questions that you and the Committee Members may wish to raise.

Senator GORE. Well, thank you.

I want to congratulate you on that statement. And we look forward to working with you.

I earlier mentioned the presence of your wife, Patricia Brassor Bromley, and your daughter, Karen Lynn Bromley. We want to welcome both of you here, again.

I am very pleased to note that quite a few senior science officials from the Administration are present in the audience. And I see that as an encouraging sign of high-level attention within the Administration to science and technology issues. And we want to welcome Deputy Under Secretary of Commerce for Technology, Lee Mercer; from the National Science Foundation, Bob Corell; and Rick Anders, Assistant Secretary of Commerce for Trade.

I also want to welcome your stated intention to fill out the four Associate Director positions authorized by the Congress. I have had an opportunity to talk with you privately about the way you see those positions. We will get into that a little bit later in the hearing.

I also want to say that after the August break, and soon after the conclusion of the series of hearings reviewing science policy in detail, we want to get all four of your nominees here and along with you and then, taking our review of science policy as a base, pose detailed questions over the full range of science policy, and then vote on their confirmation as well.

We are going to spend a little more time today than is customary when a distinguished nominee, certain of approval, is before a committee. Typically, such hearings are fairly routine and very brief. We are going to take a little more time today to go into some of the questions about science policy.

Let me defer my own first round of questions by yielding, first of all, to our ranking member, Senator Danforth.

Senator DANFORTH. Mr. Chairman, thank you very much.

I really only have two questions, Dr. Bromley. I congratulate you and I am delighted the President has nominated you for this position.

Both questions really have to do with what Congress is up to—the role of Congress. This committee is called the Committee on Commerce, Science, and Transportation. And I had the honor of chairing this committee back in the golden era.

Senator GORE. I remember those days.

Senator DANFORTH. I felt at the time, and I still do whenever we are called upon to make various decisions in Congress about matters relating to science, that there is only one handicap that I have. And that is that on scientific matters I am a total ignoramus. And yet, I am asked to make a variety of policy decisions. Am I for or against the supercollider? Should we do something, nothing or what, relating to HDTV? Should we have a space station? Should we go to the moon? Should we go to Mars?

We put huge amounts of money into large installations that are supposed to develop fusion energy and then we are told that somebody has done it in a picnic basket.

I do not know what to make of all these things, and yet I am called upon to make a lot of decisions relating to them.

You were good enough to visit me in my office yesterday, and I suggested that one thing that would really be helpful to me, and maybe to other senators as well, is if you and maybe people you could recommend could visit with us on an informal basis—maybe for breakfast or just for an hour at a time.

I think it is very useful for you and others to come before this committee, and yet committee meetings tend to be set pieces. When people are in public forums, they feel compelled to lock into positions, sometimes prematurely. And my hope is that whatever decisions that we make as elected officials be as wise as possible and as informed as possible.

And as far as this senator is concerned, it may be I am alone in the Senate in this regard, you are really dealing with a virtually blank slate. So, my question to you—you are really the President's science advisor, but would you be willing personally, or through people you could recommend, to arrange some informal get-togethers? And I mentioned this to you early this morning, Mr. Chairman. I am not sure you were awake when I mentioned this to you.

Senator GORE. By early, he means 1:00 a.m.

Senator DANFORTH. But you also indicated an interest in this. And I would think, Mr. Chairman, if you could perhaps arrange maybe some breakfast meetings, or I could, or any of us could, because the idea is not who convenes the meetings, but just whether there could be some opportunities.

Last spring, Senator Chafee convened a meeting of Republican Senators, a large group, down in Charlottesville. And your predecessor, Dr. Keyworth, made a presentation. And it was very, very interesting. So, that would be my first question to you. Do you think you could find the time and make the effort to cast a few pearls to the swine every now and then?

Dr. BROMLEY. Not only, Senator Danforth, would I be willing to do it, I would be enthusiastic about having the opportunity to meet with you and your colleagues under the conditions you describe. I say so because I would learn enormously from it, and I believe that we would benefit in many ways from this kind of interaction. I would be very enthusiastic about it.

Senator DANFORTH. Thank you very much.

Now, the second and last question that I have for you, again, has to do with what we are about. I am told that the Federal Government is now spending in excess of $60 billion a year on research and development. Now, that sounds like more than I would think, but that is what I am told, over $60 billion a year in research and development.

We have witnessed the transformation of federal research spending, in my opinion, into a colossal pork barrel. And this has particularly been with respect to spending by the Department of Defense. But there is no particular reason why the pork barrel approach to research spending would not be extended elsewhere. Politicians find it irresistible, and particularly members of the Appropriations Committee, to slice up the hog when it comes their way.

Strong arguments are made on the floor of the Senate, particularly when Department of Defense appropriations bills are on the floor. On one side, people argue that research should be the great advantage the United States has in the world; that we have some of the premier research institutions and that if we have a finite amount of money, and even $60 billion is finite, then that money should be spent in the very best way, and we should be buying the highest-quality research we can get.

On the other hand, there are those who argue with equal passion, and some people on this committee have made this argument, that there is an Old Boy Network, and that it includes institutions such as the one that you have served for the last 30 years. And that peer review is simply a way of keeping the money in the Yales of the world, and that what we should really do is to pursue an egalitarian theory of research, and spread it out evenly.

So we have granted millions of dollars, in some cases, $10 million or more, to universities that do not even have the departments that are supposed to be doing the research. My own view is that is crazy. And yet, there is a lobbying firm here in Washington that has been created in order to grab the pork.

Now, my question to you, and I should really be serving up these big soft pitches because I do not want you to make any enemies before your confirmation vote comes, but what can you tell us about this?

And can you be objective? I mean, if you are of the view that we should not be giving millions of dollars to incompetent researchers, I am sure you will be criticized as being an elitist Yale professor. So, what would you tell us about this?

Dr. **Bromley**. Well, Senator Danforth, let me begin with your first point. I quite agree that a large fraction of our public shares your concern that, on the surface, the expenditure on defense research and development seems extraordinarily high. As the Chairman mentioned earlier, it has increased from 50 percent of our total expenditure to now roughly two to one.

But there is a matter of definition here, sir. In that expenditure in the Defense Department, some 92 percent is specifically in the development and demonstration area related to specific weapon systems; decisions that were made some distance in the past.

Of what is left, of the remaining 8 percent, I would have to say that less than 1 percent would fit the definition that we normally use in academic research.

So, to compare the two directly is rather difficult, because you are comparing quite different entities.

And I would also add in that context, sir, that specifically at a time such as this, as the Chairman mentioned earlier, when tensions seem to be falling back, is a time when the Defense Department may need, in fact, to put more support behind its fundamental research so that it is prepared not to be blindsided and not to suffer technological surprise by more sophisticated, more complex weaponry.

But I am focusing, I would emphasize, on that less than 1 percent of defense R&D.

There is no question that this is an issue that I certainly, if I am confirmed, will want to examine closely with my colleagues in the National Security Council and in the Department of Defense.

There is a great deal about this, sir, that I do not know about in detail, as yet.

Turning, then, to your second point, if I may, the question of the distribution of federal support to the research community. First of all, I think we would agree that, because in pure, basic research, there is no way to tell in advance where, when or to whom the benefit of that particular research will flow, we find a situation where the Federal Government really is the final supporter of that research as an investment in the national future.

But, when we talk about the federal support of research at universities, we must remember some rather unique features about this country, sir. The first is that we really, more than any other developed nation, look to our universities for the basic research, the new knowledge, that we and, in fact, everyone else, requires in this highly technological, scientific world. We depend on our universities for this.

We also, however, depend upon them for the young minds trained to use that new knowledge creatively. And we sometimes forget that those really are different objectives.

On the one hand, as you quite correctly state, if we are going out to buy research, as research, by itself, obviously what we want to have are the very best people working with the very best equipment, getting us the very best research results.

However, we are also unique in this country, sir, in that something approaching 75 percent of our young people choose to attend college within 50 miles of the place of their birth. And that being the case, it seems to me that we have a very strong obligation—we really do have this necessity of developing high-quality educational institutions on a geographic basis so that these young people are not cheated out of the very high-quality education that they have a right to expect.

We tend at times, I think, to get these two objectives a little mixed up. And so, on the one hand, I agree entirely that if one is focusing only on research as such, there is no better criterion than excellence. But, on the other hand, we have another responsibility, in parallel with the first, to provide high-quality educational opportunities for young scientists, young engineers, country-wide.

Senator DANFORTH. Thank you.

Senator GORE. The ranking Republican on the Science Subcommittee is the Senator from South Dakota, Senator Pressler. Do you have an opening statement?

OPENING STATEMENT BY SENATOR PRESSLER

Senator PRESSLER. Thank you very much. I have an opening statement, and I will read parts of it or save parts of it in the form of a question which I may ask you to respond to.

First of all, I am very pleased that President Bush has selected such an outstanding nominee as you for this important position. I think it is one of the most important positions in our government. Your credentials are superb. You have served with distinction in both government and academic positions. On top of that, I have received a glowing recommendation from Dennis Barnes at the University of Virginia, whose opinion in these matters I value very highly.

I would like to mention two items of interest to myself and my state and I hope the United States. First of all, I think Senator Danforth has raised one of the questions.

I have been a champion of EPSCOR trying to help some of the smaller universities and smaller colleges be involved in research. Of course, it is hard to know how to allocate this so that it is done efficiently and well. I am very concerned about maintaining and increasing the competitiveness of smaller colleges and universities in this country. And I have mentioned the EPSCOR program within the National Science Foundation. Yale and the next five or 10 most prestigious universities in the country do exceptional work, but please do not forget about the fine smaller state universities and private colleges we have.

Second, I have a great interest in the space program in general and the satellite programs which monitor earth changes in particular, such as the LANDSAT program and NASA's EOS program. These programs are very important in the study of global change. This issue will continue to take on increasing importance in the future. We need to prepare ourselves well.

I hope that Vice President Quayle and the National Space Council will take an even more aggressive approach regarding this. I attended a breakfast meeting at the White House recently and they gave the overall targets of the space program, but I was a little disappointed, I guess, that they did not make more of this EOS program although they do support it. And I hope it gets even a higher priority.

I know that you will work closely with the National Space Council to develop a responsible approach to the future role of government in the land remote sensing arena. We went a little far in our efforts to commercialize that area. I commend the Bush Administration for taking a fresh look at the importance of government involvement in remote sensing, and I ask you to support this effort.

So, with that I will close my opening remarks, Mr. Chairman.

Do you have any additional comments on the EPSCOR program and how to make research efficient, to the extent if we spread this around more, does it become more inefficient, are there problems, how can we overcome that? And then, number two, your role in the remote sensing area.

And by the way, we want to have the archives at the EROS Data Center at Sioux Falls. We want to get those into super computers so they are available to students all over the country. We want to be part of the supercomputer connection which is going to be the artery of information of these pictures from the EOS program, and we want to make a great contribution. So, that is where I am coming from.

Dr. BROMLEY. Thank you, Senator.

Turning first to the EPSCOR question, I think that that has been an excellent program. It is one that clearly I think deserves consideration for expansion because the only way that we can expand the number of centers of excellence that we have in the country is to foster excellence where we find it. And one of the surest ways of doing this is to focus on bright, young people or bright people of any age, wherever they may appear across the country and try to help them to attract good students, good colleagues and to build themselves into centers of excellence. I believe that the program is on the right track, and that it has a goal that I certainly share.

I think that one of the unique aspects of our whole approach to both research and education is that the two really are synergistic and in order to do good teaching, it is important to have good research associated with it. The two really do work together.

If we really are planning to develop high quality educational experiences across the country, we must be prepared to help the people involved in those institutions develop research programs of which they, and we, can be proud.

Turning then to your question of Earth sensing, you will recall, Senator, that the Space Council decided, quite recently, that it was not in the best interest of the Nation to have the LANDSAT program phased down. At the moment, the Administration is seeking ongoing funding to keep that program alive and healthy. It has been an extraordinarily productive program in a great many areas of both national and international activity. Your help, with your colleagues, in obtaining the necessary support to maintain that program in a healthy state would, of course, be much appreciated. But I can assure you that the Bush Administration is behind keeping the LANDSAT channel open.

You have mentioned also the importance of supercomputing in this area. This, of course, is a field which is dear to the heart of the Chairman and one to which he has made major contributions. I do not think that most people in this country even begin to realise, as yet, just what a tremendous revolution is taking place in this whole area of supercomputing, of data management, data handling, and data transformation.

It always comes as a surprise to me to recognise that more than three-quarters of the average human brain is devoted to visual matters.

Senator GORE. What was that percentage again?

Dr. BROMLEY. More than three-quarters.

If, in fact, you have a supercomputer available and you are faced with the kind of mountainous quantities of data that come from the earth sensing instrumentation, for example, or from many other areas of our modern life—the fact that a supercomputer can turn these turgid masses of data into visual images which can be manipulated so that you can see how things depend on one another, how the various parameters in a model relate, which ones are reliably connected to which other ones and so on, makes not just a quantitative difference. I would submit, sir, that it makes a qualitative difference. And we have just begun to appreciate it.

Your point that the data stored in your repository really must be made available to a much broader audience supports the Chairman's legislation in favor of the broad-band network. That is a program, of course, which I also support enthusiastically because, here again, we cannot afford to put supercomputers at every institution capable of doing outstanding research, but we certainly can afford to provide them with a broad-band communication channel which, in effect, puts those computers at their disposal and allows them to [illegible]

I think all three of your points, sir, are extremely important.

Senator PRESSLER. Thank you.

Senator **Gore**. You are off to a real good start, Dr. Bromley.

Go ahead.

Senator **Pressler**. Let me say that I think it is really crucial that you develop in your job—you know, Dr. Koop really made the Office of the Surgeon General, and the time in American history for someone in the science area to make a mark is very much needed. And I do not know if you will be allowed to do that, but I hope you will be allowed to do it because what is happening in science affects business, jobs, wages. And we are really, as you know, at a crossroads in terms of our graduate schools, our engineering areas where half our graduate students are from abroad. We have reached a point where if we are going to be a service economy, we are going to miss a great opportunity.

And you are in a position, if you are able to maneuver from a point of view of public administration or whatever it takes. We really need the science and technology policy area to be upgraded. I hope that you are listened to, and I hope that you are able to fight the bureaucratic wars and that you are able to accomplish this because we are right at a crossroads. If we lose ground in this area, there is no recovery from it.

Now, the GAO has recently recommended that the White House Science Advisor be charged with improving security in our Nation's computer networks to prevent the future spread of viruses. That is an example of something that the Science Advisor is really charged with and given authority and if he takes that authority, he can do something.

Now, I guess there are two roles here. Have you been assured that you are going to be given within this arena of public administration the opportunity to do some of these things? And, number two, are you going to fight for an arena, fight to carve yourself out a niche? How are you going to do that?

Dr. **Bromley**. First of all, sir, I have been assured by the President that he is very much interested in strengthening the Office of Science and Technology Policy and that he is prepared to provide me with direct access when this is required and the support that is required. This is evidenced I think, by the fact that the Office of Management and Budget has forwarded to the House and to the Senate an Amendment increasing our staff, increasing our support for the 1990 fiscal year. And I would ask you, sir, for your support for that Amendment.

But increased staff and good will and good wishes are not sufficient, as you well know. And so, I would answer that I have every intention of getting involved in the bureaucratic channels that are required to make things happen.

I view my role here as being twofold: first of all, to make sure that President and, where appropriate, the Congress, get the best possible information that I can distill from the scientific and technical community—and with that a measure of how certain, how firm that information is. The Second part of my job is to take the decisions that are made by you gentlemen here in The Congress, and by the President in areas of science and technology, and do whatever is necessary to make sure that the required things happen.

Senator PRESSLER. Good. Well, I certainly hope so and I wish you well.

Let me say that sometimes there is a job and a man fills it and you are certainly the right man if you are able to pursue those things. Very frankly, I have felt that the space presentation we had yesterday—this is my personal feeling—we missed the point of the importance of the EOS program and the relationship of some of the problems we have on earth. And it is good to have vague long-term goals, but we have some real problems to solve. That is just my personal reaction to some of the things of the last couple of days.

But aside from that, there is a real science and technology crisis in terms of leadership; we are crying out for it, and it has to come from the White House. It has to come from you. And you have a tough job. And I am going to be supporting you and watching you there as you go from your idealism to the tough world of carving out a turf and somehow making this thing happen. Good luck to you.

Dr. BROMLEY. Thank you, sir.

Senator GORE. Dr. Bromley, I am going to ask my first round of questions. My colleagues who have joined us here, Senator Rockefeller and Senator Kerry, also have indicated that they have statements for the record.

Let me ask a few questions and then turn first to Senator Kerry and then to Senator Rockefeller.

I did want to note the statement made by Senator Danforth earlier about a series of informal gatherings, and I welcome your acceptance of his invitation. And I look forward to participating in those informal breakfasts that he talked about.

Now, Senator Pressler has talked about the way in which you approach your job, and you made reference to assurances of direct access to the President. Without asking you to talk about the substance of your conversations with the President, I would nevertheless like to explore what understanding you have about the nature of your access. Is it to be regular? Is it to be as part of a routine? Is it to be irregular intervals at your request? What is the nature of that access according to your present understanding?

Dr. BROMLEY. It would be premature for me to answer, Senator, because the President and I have not arrived at any specific schedule, if you will, because we have been holding off until such time as this hearing took place. But we do plan, if I am indeed confirmed, to sit down and work out just the answer to your question. We have not done it as yet.

Senator GORE. Well, I would simply express the hope that you will have direct access on a regular, routine basis. I am convinced that the single most powerful force for change in our modern world is the accelerating scientific and technological revolution. An elected representatives of our people, including the President, must engage in a more intense dialogue with scientists who are equipped to enable them to better understand that force of change, the structure of that revolution, the way in which it interacts with public policy and the demands it makes upon our institutions.

I am fond of quoting perhaps too often a statement by Thomas Jefferson, who said, "Our laws and institutions must move forward hand in hand with the progress of the human mind." We have seen more progress of the human mind, if you will, more new discoveries, more dramatic changes in our understanding of the world around us in our lifetimes than in any other period of history. And the rate of change is, of course, accelerating daily. It is a cliche to note that by now.

But it is also abundantly obvious that our laws and institutions are not adapting anywhere nearly as quickly and that public policy is lagging far behind the changes in the world around us caused by innovation in the scientific and technological revolution.

Dr. Bromley. Senator, if I might, I would point out that although the President and I have not established a detailed schedule, you might be interested in knowing that in discussions with him, in setting up the new President's Council of Science and Technology Advisers, he has made it very clear that he intends to meet personally with that group. It will be a distinguished group drawn from across the spectrum of the science an~~d techno~~logy communities in the Nation. The fact that the President has every intention of personally meeting with it, takes us back a number of decades to the early days of the President's Science Advisory Committees.

Senator Gore. Senator Pressler referred to Dr. Koop. I also want to refer to Dr. Koop and urge you, as you consider what style you want to adopt in your role as an individual advisor to the President, to look carefully at his success. He chose not to self-censor his remarks to keep them in line with what he is supposed to be, administration policy. He chose to exhibit tremendous personal courage and intellectual integrity in stating the facts as he saw them, surprising people in the process, living up to the old Mark Twain aphorism about astounding the rest. And I would urge you to emulate the fine quality of leadership that Dr. Koop provided.

Now, as you go about giving advice to the President, who else do you identify as the key players in formulating science policy in this administration?

Dr. Bromley. There are a number of other players, of course, and the mixture of science and technology, of course varies with the issue. But I obviously will have close contact with General Scowcroft, the National Security Adviser. I will obviously have frequent occasions to consult with the Presidents of the National Academies of Engineering, and of Science, of the Institute of Medicine, the Director of the National Science Foundation, the Director of the National Institutes of Health and the senior officers of many of the federal agencies. There are something between a dozen and 20 senior scientists in the senior levels of government that I would consider to be people with whom I will interact on a frequent basis.

Senator Gore. Now, you mentioned your intention to appoint four assistant science advisers. What title did you use?

Dr. Bromley. The title specifically, sir, would be Associate Directors as specified in the 1976 laws.

Senator Gore. Associate directors. Congress came up with that title.

Dr. Bromley. Yes. And the areas in which I would propose to ask the President to make those appointments would be in physical science and engineering, in life sciences, in policy and international affairs, and in industrial technology. The latter is a new area for

OSTP, and I select it for two reasons: one, because I believe that the area is extremely important to our future, to our economic competitiveness; and also because, quite frankly, I want to send a message to the industrial community that this Administration means business in this area. And so, those are the four areas.

But as I emphasized in my written statement, sir, I would want to reemphasize that the people, whom I am hoping to bring aboard for these positions, in addition to being experts in those areas, have the qualities of character, personality and mind that will allow them to serve with me as generalists to tackle whatever comes up and hopefully make wise recommendations to the President.

Senator GORE. Well, I commend you for those intentions and plans, and particularly commend your stated intention to select that fourth individual on industrial technology. Your own background is not in that area, and I see that as a refreshing recognition of the fact that you wish to get particular assistance there. Indeed, the country is insisting that our government pay much more attention to those questions.

Was your decision to come to Washington a difficult one?

Dr. BROMLEY. In some ways, yes. I had just completed, Senator, a 10-year project which gave me one of the three best research facilities in the world in my field. I had some 30 graduate students of excellent quality in my laboratory, and it is difficult, just when something of this sort is ready to turn on, to back away from it.

But at the same time, I came to Washington because I felt that it was important, that public service was something that should be part of all of our careers if we can make it so. I was supported in the belief that I could do something by my discussions with friends who indicated that if I were willing to come, they would be willing to pitch in and help. I am here because, as I would like to make clear, I really do feel that working together with my colleagues in the White House and here in the Congress, that we can make a difference.

Senator GORE. Well, I too am optimistic and encouraged by your appointment.

You mentioned your support of the information super highway proposal that lies before this committee. And I welcome your support for that.

One of the other priority areas of investigation for us has been global climate change. I am wondering what your basic view of this problem is. As you may know, my own view is that we will look back upon this present era as a time when the scientists who were most familiar with global change were not heard clearly enough.

You and I were discussing the history of the scientific theory of continental drift. In the 1950s, the leading scientists who told us that continents moved across the face of the planet were sometimes hooted and ridiculed in public forums. The majority of the scientific community felt that the very notion of continental drift was ridiculous. And yet, the global pattern which convinced these scientists they were right was soon filled in with lots of detailed data proving even to the doubters and cynics that their seemingly outrageous theory was, in fact, obvious and correct. The history of science is replete with similar examples.

I remember in my own school-age years hearing a classmate in elementary school ask the teacher whether or not South America and Africa ever fit together. And the teacher laughed and said that is ridiculous. That child went on to be a derelict and drug addict.

But later on it became apparent that that pattern, so obvious to a child, was scientifically correct. But the teacher assumed that continents are so big they cannot possibly move and didn't challenge that assumption.

Presently many scientists and many in other fields just assume that nature is so vast and powerful that humankind can't possibly be causing changes of a magnitude that nature cannot adapt to easily and quickly. So, many who say we are causing global climate change are ridiculed and challenged and hooted. There is somewhat less of that now, but it is still there.

I wonder where you are on the continuum. Do you think it is a speculative idea, the greenhouse effect, global climate change, the new relationship between the species and the planet? Do you think it is well-established? What is your view?

Dr. **Bromley**. First of all, Mr. Chairman, let me say that I do not think there is any question at all that part of the problem here is the one you have alluded to, namely, that a great fraction of our people simply take the point of view that the planet is so much greater than they are, that there is not much that humankind can do to it one way or the other. The fact is, however, that the carbon in carbon dioxide that we have released since 1850, some 650 billion tons, is the biggest impact that our species has had on this planet.

It is also true that we have a marvelous demonstration piece just inward toward the Sun. Venus, our sister planet, of course is a textbook example of greenhouse effect run amuck, the temperature of the surface equaling that of melting lead.

I do not think that, any reputable member of the scientific community, doubts that the greenhouse effect represents real physics. There is no question about that. We use the effect all the time; we would not be alive on the planet were it not for the greenhouse effect. And I think that there is general agreement, too, that if we continue to put greenhouse gases into the atmosphere, we will eventually see a warming of the atmosphere.

Where I think reasonable people still differ is on the predictions about, first of all, the exact rate at which these changes might take place and, second—and much more difficult—as I think we have discussed and agree, when we start talking about local questions, small areas of the planet, our ability to make any kind of concrete prediction rapidly becomes less and our predictions less significant and less scientifically supported.

So, in the global sense, I do not think there is any question; the greenhouse effect is there and we have it clearly ahead of us. The question that we really have to address is that of knowing how the driving force produced by the greenhouse gases that we have liberated compares in magnitude with the natural driving forces, and how the fluctuations that occur naturally compare with the temperature rise that we have been watching.

I think we agree that one of the most dramatic pieces of geophysical data that has ever been taken is the series of carbon dioxide measurements made by Keeling and his crew from the Hawaiian peaks beginning back in the 1950's that provides a dramatic statement that we are doing things to our planet.

This is an area where I think our Nation has taken a very real leadership role. You, sir, have helped in that role. We are in a position, having the instrumentation, having the data handling capabilities, but the vast mass of data that comes in is worthless unless we have people trained to massage it, to interpret it, to bring it into a form where one can make reasonable hypotheses and decisions on its basis. We have a very real lead here, and I think we therefore have a responsibility to maintain that leadership.

As you know, the Committee on Earth Sciences has been working under the Federal Coordinating Council to try and take an overview of the science involved and are just on the point of issuing a report. That is only one of a great many activities that will be under way within the not too distant future.

I should say, in particular, that when the President's Council of Science and Technology Advisers is established in the very near future, one of its first tasks will be to take a long-range, strategic look at this whole question of global warming. What I would like to get from it is as objective a statement as is possible with uncertainties spelled out clearly and lack of uncertainties spelled out clearly too; I think we agree that there are cases where people tend to confuse where the uncertainties are and where they are not.

Senator GORE. I will pursue that in the next round of questions. I apologize to my colleagues for taking more time than is customary on the first round.

Senator Kerry?

Senator KERRY. Thank you very much, Mr. Chairman.

Dr. Bromley, I join my colleagues in welcoming you, and it is almost unnecessary to say it, but you are, obviously, enormously qualified for this position. I think the key questions that come to us are more how you view your role and how you intend to pursue it.

I was struck in your testimony. You set out two principal problems that you want to focus on. One is the longer range strategic vision of science and technology, and the other is placing more attention on the T in OSTP than on other sectors. And I can understand that.

I also was struck, as I went through it, by the capacity of this job to touch so many vital sectors of our current endeavors. You set it out very adequately I think in your prepared testimony. You mentioned the environment and ecology, and you have just touched on that again a minute ago. Public health which, obviously, is increasingly important and will be more so in the future. The whole issue of economic competitiveness which cuts across an enormous number of agencies. Education and training—with both the human resource side of that and its impact on the work force, as well as the institutional side of it. There are national security issues tied to science policy. And space, and energy utilization and supply, information science and technology, the computer revolution, artificial technology and so forth.

I think the President in his February 9 message when he stated his intention to make you the Director of OSTP, and also the assistant to the President for science and technology and chairman of this new broad-based President's council, is giving you a much larger role and a much greater capacity to bring these diverse elements and groups together.

Remember that since World War II, some 75 percent of the increase in productivity in this country is due to technology advances. During a time when most of the rest of the world was struggling to catch up to us, we had a playing field where we had unique advantages of communications, financial services, education, development and so forth. Now suddenly we are on a more equal and in some cases less equal playing field, with us being the disadvantaged player.

Your role looms, frankly, larger than ever before. I want to second what was said with respect to the Everett Koop model.

Finally I am a little concerned because I read in your testimony you say on page 12, "I view my own role, if confirmed, as being that of a trusted member of the President's inner circle of advisers, not a spokesman for the scientific and technological communities." Now, is this a fundamental limitation that you are placing on yourself? In view of the breadth of this job, the importance of it, in our current world, is this the right way for you to be approaching it?

Dr. BROMLEY. Thank you for asking that question, Senator. I would like to clarify that statement. What I implied by saying that I was not a spokesman for the scientific community really is that I feel that it would be presumptuous of me to try to speak for as diverse and broad a community as is out there in science and technology.

What perhaps I should have said—what I have said this morning—was that I do not propose to be a lobbyist for that community. But that does not mean in any sense that I will not do everything in my power to represent the various aspects of the science and technology community and to convey their consensus, their judgments and make sure that they get phased into presidential level decisions and discussions.

Senator KERRY. Do you have an agenda? Do you have a sense of what you would like people to say when the term ends or you choose to move on? How will people measure your success? What do you want them to say you accomplished as the Science Adviser to give the job a new definition as well as to move us forward in these sectors that I have outlined?

Dr. BROMLEY. I think, Senator, I would have to give two answers to that. First, I would like at the end of my service here to have President Bush recognized as being the President who has most effectively used science and technology in his administration and has along the way also strengthened American science and technology. That is my primary function.

My secondary function, of course, is—with my colleagues in OSTP, in the Advisory Council and throughout the Federal Government—to try to make sure that we make forward progress in a number of the special issue areas that I have outlined in my written statement. I, of course, have a particular interest in education and training; I have been involved in it for a very long time. I am very much interested in the whole question of economic competitiveness, and in the environmental aspects of Federal policy. But I would not want to, in any sense, spell out something specifically as my agenda because I really do view my role here as providing an objective statement of what science and technology have to contribute to a discussion—or be impacted by the discussion—without tilting it with too much of my own thoughts.

Senator **Kerry**. Well, I understand that. When I say your agenda, I really mean more the scope of the advice that you would envision giving the President with respect to these monumental issues.

Let me perhaps be a little bit more precise. I have the privilege of representing what has been known of as the jewel of our engineering educational constellation, M.I.T. I was recently over there with the president of the university and others touring some of the labs. There was a biology lab that was perhaps 35 years old. One of the labs was only made state-of-the-art in the course of the last year because of an NSF grant. Private giving has been made more complicated by tax law. We are training people all over this Nation in laboratories and facilities that are outmoded, outdated, inadequate, simply not state of the art. And there are all the questions about the quality of teaching, the numbers of engineers and so forth.

What advice do you envision giving the President? With your background you must be well aware of this deficiency, in the facilities funding process and the tension over the budget with respect to those issues?

Dr. **Bromley**. Let me, first of all, Senator, make a general comment, and then I will try to answer very specifically the question you have raised.

There is no question at all but after more than a decade of belt-tightening, deferred maintenance, and the hope that if they could hang on for one more year things would get better, our universities find themselves with crumbling infrastructures. In many cases the equipment that is being used in education is older than the students, and in a great many areas, there really are alarming shortages both of students and of faculty.

There have been, within the last 5 years I would say, perhaps half a dozen rather detailed studies of what it would take to put the U.S. colleges and universities back at an acceptable level, let's say, of infrastructure. And hopefully from there on, we have to come up with mechanisms that would allow our educational institutions to be self-sustaining.

So, let me address the first question. What would it take to bring our educational institutions back to a reasonable level of equipment and infrastructure, laboratory space and so on, just simply to keep the buildings from falling down about their ears? That has been studied by a White House Science Council panel of which I was a member. It has been studied by a group under then Representative Fuqua. It has been examined by a group under Representative Walgren, and the President has raised it again in his February 9 message.

Almost all of these examinations, Senator, come up with roughly the same estimate for the total cost that is out there. It is roughly $10 billion over 10 years, and almost everyone who has examined this matter comes back with the recommendation that if the Federal Government picks up 50 percent, that 50 percent of the cost should be matched from non-Federal sources.

This is roughly the magnitude of the problem that we have before us. It is a problem that will not repair itself. We must address it, and I will certainly advise the President, and anyone else whom I can get to listen, about the seriousness of this problem.

But there is a second part. I would not want to see us 20 years downstream going through this same discussion. The universities must share some blame in this. The universities, in fact, should have known better in some aspects of this problem because they continued to harbor the lingering hope that if one could just hold on, the growth rate that occurred post-Sputnik in the 1960s might return. I am afraid that was, and is, a forlorn hope.

Universities must learn to function within realistic budgets. And in order to make that possible, I believe that we have to change some of the regulations under which the Federal Government interacts with universities, specifically to recognize more realistic amortization schedules so that buildings can be written off over something like 20 years rather than the 50 years now used; so that equipment can be written off in something like 7 years rather than the 15 now used. The fact of the matter is that 50 years and 15 years no longer make sense with the rate of improvement and change in modern research instrumentation and facilities.

Senator **Kerry**. I am delighted to hear your answer, and look forward to the President acting on that advice. We have been struggling to find some of that money, the $10 billion, which has been floating out there for a number of years now. I would suspect that the number is larger at this point in time. But I appreciate the answer.

I just have a couple of quick questions. I do not want to delay my colleague here.

As you know, American scientists historically have had a belief in sharing information openly and freely and really our scientific establishment's success has been based somewhat on that. Recently there was a very highly publicized controversy at M.I.T. about the sharing of research with the Japanese. Increasingly the marketplace is changing, and corporate entities shift and ownership shifts. We are engaged more and more in this international marketplace, but we have not adjusted, in terms of public policy. What do you think is the appropriate policy regarding access to American university research in light of the increased funding of research from foreign sources?

Dr. **Bromley**. I would have to say, sir, that in terms of basic research, I would be opposed to any barriers to access. As we move from basic research toward know-how, toward technology, we have to, of course, be aware that there are potential matters of national security, and there are matters, in fact, of economic competitiveness that may raise questions.

But in the kind of program, specifically the kind of program to which you referred at M.I.T.—Stanford has a similar one, for example—where industrial organizations, both in this country and abroad, can, by paying an appropriate fee, have access to faculty, to research results and so on, I think that the fundamental problem is not that we have too many foreign takers, too many foreign people getting access to these data. Our problem is that too few of our American companies have really taken the initiative to come and take advantage of this very powerful source of know-how, of new knowledge.

One of the matters that is high on my priority list, if I should be confirmed, is to look into what we can do about improving the transfer of information to our own companies and what we can do about improving, in cooperation with the State Department, with some of our industrial organizations, our collection of pertinent data in Japan and Europe. We are not doing, in my view, nearly as much as we should as an industrial power to make ourselves aware of what is happening outside of our borders. Our competitors are much more efficient and effective than we are in this context.

Senator KERRY. I have a number of other questions but I do not want to go longer than is appropriate for a first round and regrettably I cannot stay for the second round because I have a flight I have to get.

But as Vice Chairman of the National Ocean Policy Subcommittee I was very heartened by your references in your testimony to the ocean pollution issue and so forth.

Let me just say to you before I depart that I am extremely concerned, as I know my colleagues are also, about the difficulties NOAA has had in getting funding. Through the 1980's NOAA has suffered far greater cuts than other Federal agencies and yet NOAA is the principal agency with respect to the gathering and monitoring of scientific data that play an essential role in precisely the kind of determinations you have referenced in answer to Senator Gore's inquiry.

I hope you, in the important new role that you are going to be defining—not just playing, but defining—will really step forward on global warming issues and on ocean pollution issues which are all interrelated. There are none of them, now, that are really separate.

I want to talk to you a little about the budget process, but maybe I will just submit a couple of questions in writing. I would share with you a particular concern. We have gone in 6½ years from a split in our Federal R&D dollars from about 50-50 civilian and military to 72 percent military, 28 percent civilian.

While other nations, particularly our principal competitors, take some 13 or 14 percent of their civilian research dollars and put it into industry-related research, we put less than 1 percent of ours. It is my hope that you will be an Everett Koop science adviser who will galvanize this Nation, as it ought to be, around these issues.

It is my personal belief—I know the Chairman shares this, Senator Rockefeller shares this, and so do the members of our competitiveness task force—that we need a new definition of national security that involves understanding the interrelationship of all these issues.

I think you are about to be in a unique position to have access to the President, to have influence on the President, to be able to help us define a comprehensive, national R&D policy and to begin to address these issues which have been neglected.

I hope we are going to get away from a short-sighted political period, where short-term narrow politics are obscuring all the long-term choices of importance to the Nation. We are talking about going to Mars and we are talking about planned manned Moon stations and we cannot find the money for Mission to Planet Earth and we cannot find the money for three-quarters of the basics that we are struggling to provide.

I just think that debate has got to be engaged in and I welcome you to it, Doctor. I think you are eminently qualified to help us enlarge it and progress forward with it.

Thank you very much. Thank you, Mr. Chairman, for your indulgence.

Senator GORE. Thank you, Senator Kerry. I do not know if you were here at the very beginning of the hearing when I said this, but let me repeat it briefly. After the break in September we are going to have extensive hearings on science policy across the board and Dr. Bromley has agreed to come back after his confirmation with the four Associate Directors who will be up for confirmation at that time.

Senator KERRY. I look forward to that. I think that is a great idea, as long as we do not tie him up so much that he cannot be out there doing the other stuff.

Senator GORE. That is a good reminder. Senator Rockefeller?

OPENING STATEMENT BY SENATOR ROCKEFELLER

Senator ROCKEFELLER. Thank you, Mr. Chairman. Good morning, Dr. Bromley.

Mr. Chairman, thank you for holding this hearing today on Dr. Allan Bromley's nomination to be Director of the White House Office of Science and Technology Policy.

Every year—it seems to me—that the plateful of science and technology issues that Congress and the Administration have to deal with expands. Be it global warming, human genome mapping, FSX technology, supercollider, the space station, HDTV or alternative fuels—science and technology issues quite literally consume much of what we do in Washington. And the reason is that have come to recognize the connection between America's capabilities in technology and science and our economic and competitive future.

Consequently, the Director of OSTP is an extremely important position. As the highest ranking science official in the Administration, the new Director of OSTP will have an essential role in Federal science and technology policy. The Director of OSTP, in my view, should be the big picture scientist advising the Administration, Congress, and especially the President on the full range of science and technology issues. This position provides the opportunity to set priorities and ensure that different economic, research, and security goals are considered together.

Dr. Bromley appears to be well suited for this key position. He is widely considered a brilliant physicist, a world renowned academic, and an articulate and persuasive spokesperson—which he will need to be.

I understand that Dr. Bromley has taken an active interest in negotiating international science and technology exchanges with other countries and I would hope that he would continue OSTP's active role in overseeing U.S.-Japan science and technology relations.

Although due to scheduling problems, I have not yet had the opportunity to meet with Dr. Bromley, I welcome the opportunity to meet with him to discuss some common interests—especially alternative fuels and the crisis in science and math education.

I want to remind those of us here today about an article written by Jerome Weisner, White House Adviser to Presidents Kennedy and Johnson, that appeared two years ago in the May 27, 1987 Washington Post. The article was called, "Why we Need a Tough National Science Adviser," and I ask that it be placed in the record by reference.

Jereome Weisner concluded the article by saying, "An essential part of this task (of reversing the decline in U.S. technology) is to build the presidential science advisory mechanism back up in a way that would regain the confidence of the Congress and general public in the government's decisionmaking process. This will not be easy, given the recent history. But it must be done."

I realize that it's a tall order but I am very hopeful that Dr. Bromley can fill those shoes.

I want to be specific, Dr. Bromley. One, I was not here when you talked about EPSCOR but I am delighted by what I am told you said. Secondly, you will have under your jurisdiction in OSTP the Japanese technical literature effort which was started here in the Congress responding precisely to your concerns that Americans are not curious enough about what goes on in foreign labs.

This is a monumental part of our problem. It is interesting to me that the only private concern in this country which was making an effort to translate some of the 10,000 technological journals that come out of Japan each year, on everything from superconductivity to refrigeration, went broke last December. So what you will be supervising in Commerce, underfunded as it is, with Jacob Javits' daughter heading it up brilliantly, as she is, is very important.

How can we touch the self-interest, as well as the imagination, of the American industrialists and make them understand that it is one thing over a period of 35 years to sell, through about 30,000 to 33,000 different transactions most—Europeans are part of it, too—of the technology which the Japanese have now. It is not a question of whether really there is a Japanese miracle but whether there is some extremely shrewd purchasing by the Japanese of our technology. And there are all the problems involved in cross licensing and the rest of it.

But I commend that program to your paternal interest and will be anxious to discuss it with you, I think it symbolizes all the things that do not go right in this country, which if you do talk about much you are criticized for being a "criticize-America-firster."

Bill Graham, your predecessor, did a very, very good job fighting against the State Department, working with USTR and obviously with the Department of Commerce, in structuring the U.S.-Japan science and technology agreement.

That had been signed years ago, had lapsed into the nothingness which its language originally reflected and following protracted negotiations with very little happening for a very long time there was finally a meeting between Prime Minister Takeshita and President Reagan forcing a conclusion. The Japanese were willing to discuss reciprocity with respect to Federal and other research laboratories—particularly the Federal labs.

It is one thing to have an agreement, it is quite another thing to implement it. The Japanese did not want to sign this and I cannot conclude that the Japanese want to implement it. I think your paternal interest in this is exquisitely important, especially whole concept of reciprocity as between our two technological and economic powers. I would simply inquire if you agree with me.

Dr. **Bromley**. Absolutely. I think this is a critically important agreement and it is one on which my office is already spending a significant amount of time.

Senator **Rockefeller**. The Japanese like not to do basic research because we do so much of it, and of course it is in their interest not to do basic research if they have full, unfettered access to what it is that we do, which they can take and apply to their advantage and our disadvantage.

One can make the case, I suppose, that there could be a division of labor where the United States keeps the world secure and Japan helps with overseas assistance to a greater extent than we do, which they do, and gets much more into international debt, which they are.

It seems to me that it is not healthy for the Japanese not to be doing basic research, and I am interested in your views.

Dr. **Bromley**. First of all, sir, I agree with the premise. I think that the Japanese themselves are beginning to agree with both of us and my impression is that they are investing substantially more now in basic research than they have ever done before.

Perhaps it is because they are worried that we are not going to keep up our end of the arrangement and provide the basic research results that they have used in the past, but I do see, certainly in the circles in which I have been involved, a significant increase, in their basic research activity but nowhere near the level that we have here I would agree.

The other thing that I think very important for us to keep in mind is that we tend, in our technology, in our applied science as well as in our basic science, to focus on the revolutionary development—the Nobel Prize type development—whereas our colleagues abroad tend to focus on the evolutionary development that can make a product a little better, a little cheaper, a little faster and can therefore nibble away market share in rather impressive fashion.

I think we have also to consider changing our reward structure in the private sector and in universities as well, to reflect the importance of these less than revolutionary discoveries and developments, because in the long run I think this will have a tremendous impact on our economic competitiveness.

Senator **Rockefeller**. Another specific question: a major impediment, although one rarely noted, to American competitiveness in relationship to Japan is an interesting organization called the Japanese Patent Office. They have built a magnificent new building, a state-of-the-art building, but also, at least in my judgment, state-of-the-art nontariff barrier capacity.

Technology, as you would know better than any of us, has a patent cycle of a year and a half to two at the most. The Japanese claim to process patents in a year or two, but in fact it takes between six and seven years. The effect, through their many, many ways of opposing, delaying, questioning paragraph by paragraph, refusing to hire more personnel, and many other things, is that they in effect basically say to the frustrated small, or midsize American firms, that are responsible for so much new technology, you can have your patent and we will have your technology and cross licensing is once again done.

That is insidious. We have conducted bilateral negotiations with them on this matter for quite some time. They are getting nowhere. I am to the point, and I have met frequently with the gentleman who runs the patent office over there and what he always says is that you do not understand the way we do things in Japan and you do not understand what it is that, in fact, we are doing. I think I do.

But I am to the point where, unless there is almost immediate results from some of these negotiations, that I would like to introduce legislation which would essentially say, you do not give it to us, we do not give it to you. I mean, something hopefully a little less crude than that, but again stressing reciprocity, so hard-earned in the U.S. science and technology agreement with Japan.

I would ask, sir, that you familiarize yourself with that problem. It is a major one.

My final question is philosophical: 60 percent of people getting American Ph.Ds in engineering are foreign. We all know that statistic. Most scientists first aspire to go into science when they were 10, 11 or 12 years old. There has to be something triggered in young men and women of that age, an instinct or an interest, a predisposition towards, science or engineering. I am not either a mathematician or a scientist, but I think it is clear that we are clearly not doing that.

We can and I have introduced a bill which virtually bribes those who major in science and mathematics at the college level, not those who are majoring in education and taking specialties in math and science, but those who major in math or science or engineering, to go into teaching. We pay them—if this bill passes—$7,500 for one year or $11,000 for two years, if they will go and teach in an elementary or secondary school somewhere in this country, preferably one that is under-served in those areas

That is rather an odd thing to have to do when it is technology and science that fascinates the world, which runs the world, and it is so clear that we are not producing on what it was that we were once best at. Philosophically, what do you suggest? How do you inspire young people? Do we work in cycles? Does the government have a role?

Dr. BROMLEY. I think, sir, the government definitely has a role but I would back off a little and focus on one aspect of your question—what has changed? I think one of the things that has changed is simply that for a very long time we, in this country, took advantage of the fact that the only careers open to women were teaching and nursing and now that, fortunately, those career boundaries have fallen away we no longer get the superb teachers and nurses that we used to, and we have to face up to that fact.

The unfortunate second part of the problem seems to me that in very few schools in this country—and you are absolutely correct that scientists, engineers and mathematicians typically make their career decisions in junior high or before, and if you have lost them then you have lost them permanently—the problem is that very few schools have fully qualified teachers to the standards that would be expected in European schools, Japanese schools, almost any other schools.

The situation, frankly, in our pre-college education is nothing short of scandalous. I think we all agree on that. So what we have to do, it seems to me, are three things. We have first of all to get the parents of this country involved again in demanding proper education at the high school level.

The only way I know of doing that is convincing, perhaps, the 20 or 30 of our major universities to simply increase their entrance requirements so that failing satisfaction of those requirements and acquisition of that training in high school the graduates would not be eligible for admission. This will focus the attention of parents rather directly on the high schools; something like this I think is essential.

Secondly, we have to arrange—and President Bush has already taken action on this—so that fully qualified people from the private sector, from academia, can teach in high schools and public schools without going through years of formal teacher training.

What we really want are people who know mathematics, who know physics, who know chemistry, who know biology, or engineering—we are not getting a lot of them—who would love to come and teach but simply are not prepared to go through the years of formal, and to them, unrelevant, preparation.

The third thing I think we need to do, sir, is to develop mechanisms in this country to reward those outstanding, lonely, endangered people who are out there in little high schools—lonely spots across the country—who year after year stimulate an undue fraction of the young people who come before them to go on to do exciting things.

In my own university we recently went back and checked where our best students were coming from and if we plot this on a map of the United States we get little hot spots at places you would least expect. One person, usually, in those places is responsible for really getting kids turned on to advanced education and to careers in the sciences and mathematics.

I have been trying for years to get our university to give them honorary degrees, but it would be much more effective if you, sir, and your colleagues in the Congress would come up with some specific recognition for these superb master teachers. We have entrusted our children to them and I think we owe them more recognition than they are getting at the moment.

Senator **Rockefeller**. Mr. Chairman, indulge me one final point on that—and I might point out, Dr. Bromley that Chairman Gore did this two days ago, in fact, when he was discussing space. He recognized teachers by having some of their especially talented young students from around the country come and sit where you are sitting and talk to us about what we should be doing in space. The effect was dramatic and made the point.

You left out salary and I want to make just one comment on that. Roughly speaking, two-thirds of Japanese corporations are chaired by people who are graduates in math or sciences or engineering. Two-thirds of their counterparts in this country who run our corporations are majors in marketing or accounting, or are lawyers. Hence, for that 10, 11 and 12-year-old, there is the matter of the role model.

The role model is not just what the person looks like and where he is, but how much he makes. Our engineers in our corporate evolution tend to come to a certain point and then they stop. Not in all cases, but in most cases. Is that beginning to change, and do you have thoughts on that?

Dr. BROMLEY. I think it is beginning to change, Senator. A number of corporations with which I am familiar have recognized that this is really a counterproductive approach and have developed parallel channels so that truly outstanding engineers and scientists can progress through the salary scales to keep pace with their colleagues who switched into management somewhere en route.

But they are still a small minority and there is no question but what a lot of very good young students that I have seen over the years—and that other people have seen—simply recognize, even though they may be superbly qualified for careers in research, in technical fields, that if they particularly want to accumulate a lot of resources, that is not the direct way to do it.

Our culture simply makes it more direct to go through the management route. It is unfortunate and I think it is something we will probably have to change.

Senator ROCKEFELLER. Thank you very much, and thank you Chairman Gore and I look forward to voting for you, Dr. Bromley. Thank you, sir.

Dr. BROMLEY. Thank you, sir.

Senator GORE. Thank you Senator Rockefeller. In pursuing that last line of questions, do you feel that the enormous pressure on science and engineering faculty to obtain research grants compromises the quality of teaching in our Nation's universities?

Dr. BROMLEY. Yes.

Senator GORE. How do we counter this trend?

Dr. BROMLEY. Well, I think that there are two ways. One way would be to go for longer term support, because when David Packard and I did a study for the White House Science Council a few years ago we discovered, to our horror, that in many schools young faculty members were spending up to 30 percent of their available time simply seeking new funding, or reporting on the funding that they had managed to find.

If we could go to five year authorizations and two year appropriations and if we could also reduce, (this is my second part) some of the red tape—the reporting red tape—that is involved with support of, in many cases, quite small grants and contracts, young people at their peak of creativity could be spending their time doing something useful rather than cranking out paper having very little to do with research.

Senator **Gore**. Do you think we should increase the funds available for awards for quality in teaching as well as in research? In other words increase the funds available for developing not only research tools like scanning tunneling electron microscopes but also teaching tools and techniques?

Dr. **Bromley**. I would certainly agree with it, sir, but with one proviso and that has to do with the way in which the excellence of teaching is judged. I would want to see it judged on the basis of the production of outstanding young students, rather than by other mechanisms.

Senator **Gore**. I think that is eminently sensible. Let me turn to your budget. The Office of Science and Technology under President Kennedy numbered about 55 full time equivalents. Under Dr. Graham it had dropped to 10 full time equivalents. That, it seems to me, is an inadequate number.

You evidently agreed because—perhaps it is only circumstantial evidence but right after your discussions with the Administration on the possibility of you coming to Washington began, there was a reported agreement by Mr. Darman to raise the budget request from $2 million to $3 million, allowing 33 full time equivalents in your first year.

The agreement, as I understand it, was to further raise the budget to $4 million for the second year, allowing 45 full-time equivalents. Is that correct?

Dr. **Bromley**. I am not sure that Mr. Darman would call it a guarantee, but we have a gentleman's agreement to work in that direction.

Senator **Gore**. All right. You are learning rapidly the language of government.

Now, the amendment from Mr. Darman and OMB got to the House of Representatives appropriations subcommittee a little bit too late for it to be considered and so they did not raise the $2 million to $3 million for year one.

My own contact on the House side convinced me that they would have supported that increase if they had received the recommendation in time. I am sending a letter today, and the letter has been co-signed by Senator Hollings, the Chairman of our full Committee and Senator Danforth and Senator Pressler, the ranking Republican members of the full Committee and the Subcommittee.

This letter requests, formally, the increase that would have been adopted on the House side if the recommendation had been timely. I hope that the Senate Appropriations Committee will make that change and then secure the agreement of the House conferees to go along with it. We will just have to do the best we can in urging them to do that.

Dr. **Bromley**. Thank you very much, Mr. Chairman.

Senator **Gore**. Well, we want to support your efforts to upgrade the influence and role of the office you will be heading. I have stated earlier my reasons for believing that it is quite important to do so.

You will have several roles, though: advising the President, working with other offices in the White House, coordinating research programs at various Federal agencies. If confirmed, how will you divide up your time among those priorities?

Dr. Bromley. It is a little difficult for me to answer you just yet, senator, because I have not had the opportunity to really try to fit all of this into a schedule.

But one thing that I will try to do is to carve out a substantial piece of my time for discussions on the longer range issues with my colleagues and focusing on our strategic role so that I do not get nibbled to death by small problems. It is going to be difficult, but that certainly is my goal. To give you a specific breakdown of time at this time, I do not think would be too meaningful.

Senator Gore. Have you had an opportunity to talk with Mr. Darman about how OSTP will interact with OMB?

Dr. Bromley. Yes, indeed. I have spent a substantial amount of time speaking both with Mr. Darman and with Mr. Grady and I believe that we have reached agreement in principle that the bonds between OSTP and OMB will be substantially strengthened and that in fact we will cooperate at many levels between our two offices in the production of the out-year budgets, making it possible for OSTP to have an input in its crosscutting and coordinating role at a much earlier stage in the budget preparation than has been true in the past.

Senator Gore. One of the most difficult set of questions you will face will involve the task of setting the Federal Government's science priorities. You have mentioned some of the other key players who will also have a role in meeting that challenge, but your views will carry a tremendous amount of weight and you will hopefully increase the prominence of your position to the point where you will be the key player in shaping science policy. Thus, it is critical for this Committee to have a clear understanding of your own priorities and interests in advance of formal approval of your nomination.

Let us suppose for a moment that this Committee could write you a check for $20 billion to be used to fund science and technology programs over the next ten years. You have $2 billion per year. How would you personally like to see that money spent and where would it go first?

Dr. Bromley. I have a feeling, senator, that I would answer even better with the check in hand.

But failing that, it does seem to me that the most serious decision that has to be made really is that of maintaining a balance between the small science activities that remain the backbone of our science and our technology—activities that do not get all that much media coverage, that probably do not hit the headlines, but yet really provide the strength that has kept us world leaders for decades—and at the same time, keeping our leadership in the very highly visible areas of the megaprojects.

This administration is committed to supporting the superconducting supercollider; I support it. The space station Freedom is a high priority on President Bush's agenda. I support it as well.

The human genome mapping is something that I feel has tremendous potential. I have been pleased by the leadership in that project who have taken the view that rather than push ahead at all costs, that it was wiser to back off a little and spend time developing the instrumentation, so that in the long run we may be able to do the job better, more cheaply, and in fact even more quickly.

Those are three of the megaprojects. A fourth is the national aerospace plane (NASP). I happen to believe that the national aerospace plane is an important project, but at the moment both the Space Council and Secretary Cheney have agreed that the NASP program would be slowed down for just the reasons you have mentioned, sir.

We simply cannot afford, no matter how attractive all these megaprojects are, to do them all simultaneously and in order to make the decisions—not to make the decisions, but to make the recommendations to the President, because these decisions, ones of this magnitude, will be Presidential ones—what I would do is to make sure that before the decisions get made, that we have the best thinking of the best people we have in this country, with some help where appropriate from abroad, to make sure that we understand what we are getting—what we are hoping to get—before we move forward with major financial commitments.

I view my responsibility as that of making certain that the President can count on having the best scientific and technological input I can provide to him. Once we have that, in hand then I will be very happy to turn your check over to the President and get on with it.

Senator GORE. You did not mention the Mission to Planet Earth.

Dr. BROMLEY. I did not mention the Mission to Planet Earth because we had talked about it earlier and I have taken it as read. I consider it as very important in a great many areas that have not even been dreamt of yet. Having the data that we are going to get from that kind of a mission, I think gives us a resource that is limited at the moment only by our imagination.

Senator GORE. All right. You mentioned earlier the Information Superhighway project. Do you believe that should be a top priority?

Dr. BROMLEY. I would give that very high priority, because I think it has a catalytic effect on just about any brand of research and development that I can think of.

Senator GORE. Now, let us go back and put some numbers on the list you gave us. The supercollider is—the annual cost is $200 million. The human genome project, $100 million. The national aerospace plane, $120 million. Space station Freedom, $2 billion. How much for small science?

Dr. BROMLEY. I do not have the exact figure, sir. I would be more than happy to look it up.

Senator GORE. Okay, but presumably some. That was your top priority to make sure that we——

Dr. BROMLEY. Yes, absolutely.

Senator GORE. The network, Mission to Planet Earth, we are at $2.5 billion without including any money for small science or Mission to Planet Earth or the network. I only gave you two.

Dr. BROMLEY. That is right, which implies that we cannot do all of the megaprojects simultaneously.

Senator GORE. All right. Well, let us go back and go through the list again, then. How are we going to set the priorities and where are cuts going to come first? Small science?

Dr. BROMLEY. No.

Senator GORE. Space station Freedom?

Dr. **Bromley**. I am not in a position, sir, to make those specific statements because I have not yet been briefed fully.

Senator **Gore**. Supercollider?

Dr. **Bromley**. I am sorry, sir, I cannot really respond in a knowledgeable fashion on things of this importance without having more detailed briefings than I have had thus far, but I would say quite categorically that if I have anything to do with it, it will not be small science that is cut because I think that it would be suicidal.

Senator **Gore**. I agree with you. I also believe—and I will come back to this in a moment because I have a series of questions on it—but I also agree that the single most important science project to assist research throughout the U.S. research community would be the computer network which you and I both have alluded to before.

No matter what your discipline—whether it be physics, astronomy, chemistry, biology, meteorology, climate change—no matter what your discipline, the benefits of being able to interact at high data rates with counterparts using advanced computers and being able to share large amounts of data presented in visual form in ways that can only be done at very high rates, can do more for your research, more for your understanding, more for your ability to make progress, than any other capacity or tool now on the horizon. Would you agree?

Dr. **Bromley**. I would agree.

Senator **Gore**. Good.

All right. We have nailed that one down. Now, I think that the task of setting these priorities is obviously going to be very difficult and painful and by asking you to go back and tell us where you are going to cut, I am not seeking to make you uncomfortable and your response that you need more briefings is, of course, quite appropriate.

But we did not even get to applied research for HDTV, advanced materials and other projects that would fall within the purview of your fourth associate director and are seen by most of the Congress as really our top priority now—to find a formula for translating our scientific prowess into competitive advantage as the Japanese and others have done so successfully.

Last week, the President addressed the question of how to set priorities in science, by personally lobbying for one project on this list. The House Energy Appropriations Subcommittee last week decided to go forward with the first funds for construction of the SSC after the President personally intervened to get funds specifically earmarked for that project.

Do you know why that is such a high priority for the President?

Dr. **Bromley**. I have not had an opportunity, Senator, to discuss that specifically with the President as yet. I know that it was selected by President Reagan for his personal support and prior to the election vice President—now President Bush—had agreed that he would support President Reagan's decision.

The project is a very mature one as far as design is concerned. It has a very able group of proponents, able both scientifically and politically, and I think that one must attribute much of their success to their, first of all, having very exciting story to tell.

They really are working on one of the last main frontiers. We are within hailing distance of Einstein's dream of understanding the forces of nature and matter itself. That is a glorious dream, but it is also an expensive one, and it is up to you, sir, and to your colleagues in the Congress, to tell us how quickly we can move toward the realization of that dream.

Senator GORE. Well, it is fair to put the question to us, but as we attempt to answer that question we necessarily compare its importance to the other matters that are also said to be of importance, and they are all important.

Dr. BROMLEY. Absolutely.

Senator GORE. Now, the President has personally called members of Congress to single out the Supercollider for priority attention. If we have a limited amount of money for science and a large list of priority projects, and if the President singles out one project on that list, then he is necessarily saying, nudge out the others enough to make room for this one.

He has publicly singled out, in addition to the SSC, the Mission to Planet Earth, the Space Station, the doubling of the National Science Foundation budget. Do you know whether or not the President will be personally calling Members of the House and Senate in behalf of each or any of those projects?

Dr. BROMLEY. I do not, sir.

Senator GORE. A rhetorical question, obviously. But I want to make the point that it matters to the decision-making process and you, sir, will be playing a key role in assisting the President in his efforts to set priorities in science policy and if the President singles out one for a full court press, the consequences should be realized in advance. For example, the Supercollider funds may well come from your personally stated top priority, small science.

I support the Supercollider and have the same difficulty in choosing among one's children—favored projects that are all valuable and interesting and exciting—but as the Legislative and Executive Branches together approach this excruciatingly difficult task, we have to do so in a manner and a fashion that puts politics in its proper place.

It has a place, but so does small science, so do Mission to Planet Earth and the other projects that may not have as much political force behind them, but may have even greater value to the country as a whole.

Senator Bentsen, who is a member of the subcommittee and also chair of the Finance Committee, wanted to be here, but is engaged in other proceedings this morning. He asked that I ask the following question: The President's budget for fiscal year 1990 requests $15.5 billion for space, science and technology. Of this, $250 million is designated for continued research and initial construction funding for the SSC. This is a mere 1.6 percent of the 1990 federal research budget.

There has been some concern expressed that the SSC might nudge out funding for so-called small science projects—do you share these concerns?

Dr. BROMLEY. Obviously, sir, I share the concern that in a time of budget stringency any time one takes on a major project, one has to be extraordinarily careful, because the momentum behind a major project of this sort can easily push out some small science, unless someone is watching very carefully.

I view it as one of my major responsibilities to exercise that watchfulness to protect small science.

And all I can say is, that from the beginning—from the very first presentation of the SSC by the Department of Energy, to the Cabinet, to the President, and to the country, in fact, it was stated explicitly, that the conditions under which SSC would move forward would be incremental funding for it, and that it would not be done at the expense of the ongoing small science program. That has been reiterated again and again.

We both know that it is very difficult to stand by such an agreement under budgetary pressures. But the statement has been made repeatedly, and it is one that I have every intention of reminding people about whenever the occasion demands.

Senator GORE. All right. Well, that raises once more the question of your access to the President and the nature of your relationship and the ability you will have to express those views on a regular basis.

Let me turn—I have several other subjects to explore this morning. And for those who expect a routine sort of hearing, let me say again, that we are going to take just a little more time than would be normal with a non-controversial nomination.

We have talked about high-performance computing. You singled out the importance of visualization. I agree with you fully. In fact, next Wednesday our Subcommittee has a hearing focusing explicitly on visualization in advanced computing.

You mentioned in your statement that the human brain devotes three quarters of its capacity to the function of sight—visualizing.

If analyzed as a computer, the human brain could be said to have a low bit rate, but very high resolution. And if we can find ways to present massive quantities of data in mosiac form, revealing patterns, then the meaning of the data can be absorbed much more readily than if we continue to try and present it in sequential bits that are absorbed very slowly and with great difficulty—at least by me.

In 1986 I authored legislation which was adopted by the Congress, requiring an OSTP report on advanced computing and networking. That report was released in late 1987 and called for an ambitious, high-performance computing initiative and $1.74 billion dollars in new funding over the next five years.

Last August, Dr. Paul Huray, from OSTP, testified before our committee about that report and, along with other witnesses, pointed out the clear and obvious need for the OSTP initiative.

You have endorsed it here. You have endorsed the network and stated that you think it represents the highest priority—well, let me rephrase it—the single best way to improve the capacity of science researchers throughout the country to go about their business.

Unfortunately, the 1987 OSTP report was not reflected in the fiscal year 1989 budget proposal that came to Congress the following year.

And the former director of OSTP, Dr. William Graham, was quoted as saying, that the computing initiative would be funded by osmosis.

Are you familiar with the phenomena of osmosis?

Dr. **Bromley**. Yes, sir, I am.

Senator **Gore**. It is rather mysterious, is it not?

Dr. **Bromley**. Rather slow too.

Senator **Gore**. It has been—it has had that property in this case, also. Because another year went by, and President Reagan's fiscal year 1990 budget request came out and, once again, there was no new money for this new initiative.

If you have your druthers, when will we see a presidential budget request, including money, for the network initiative?

We have legislation that is going to mandate it and authorize it, and I truly believe it is going to pass. It has tremendous support and your comments this morning materially improve its chances even more.

But I know that the FCCSET—the Federal Coordinating Council for Science, Engineering and Technology, is working on a plan to implement the administration's strategy on this.

When will we likely see an administration initiative to implement and fund the OSTP strategy here? When will this plan be available? Is there any possibility I could get a draft copy today?

Dr. **Bromley**. That is conceivable. The report itself, in fact, is on the verge of being released—I believe it will be released next week, and I am sure that we could get you a pre-print copy this afternoon, sir.

Senator **Gore**. Wonderful, wonderful. I like the way you are doing things here.

I like the way you are doing things here.

We are going to get along very well. And I think my colleagues will like your approach as well.

Am I right in assuming that that implementation plan will be used to determine fiscal year 1991 funding levels for advanced computing?

Dr. **Bromley**. It is certainly our intent in OSTP in our discussions with OMB to use that report as the basis for our discussions and our recommendations in this area.

Senator **Gore**. Will it include funding levels for the different parts of the initiative and, if so, approximately how much will be needed to build the proposed National Research and Education network?

Dr. **Bromley**. Although these are discussed in the report, sir, I have not had a chance to study it in adequate detail to respond to you here.

Senator **Gore**. Fine.

And let me just note, before leaving this particular subject that, when we earlier discussed science and engineering education, I wanted to interject—to express my strong belief that this network, along with the computers that the network will make more functional, can do it a lot more to get young people excited about science and about learning.

A national computer network could provide learning software to schools. It could allow teachers and students throughout the country to communicate with and learn from each other more readily.

And the tragic mismatch between the potential for computers in education and the reality of computers in education has to be addressed.

I have a dream of seeing young people in Tennessee in their homes and in their schools with personal terminals, being able to have access to a national digital library that enables them to learn at their own pace, according to their own interests, following their own curiosities to master subject after subject, as they move to do so by intellectual stimulation of the task itself.

Now, let me move to the human genome project. You have discussed it earlier—both the NIH and the Department of Energy have staked claims to leadership of the effort to map and sequence the human genome.

The NSF and DOD also have provided funding of their own, but for the most part, the NIH and the DOE are the lead federal agencies.

NIH would prefer to conduct this effort through support of individual investigators working on small parts of the genome, while the DOE would like to utilize the national laboratories, like Lawrence Livermore, to work on this effort.

Which approach do you favor? Is there a role for both approaches?

Dr. BROMLEY. I would support the latter, sir. I think that there is a role for both, and I do think that it is very important for us to make use of the rather unique resource we have in our national laboratories in terms of data handling and data acquisition in large blocks.

My feeling is that there is no question that there is a role for both. We have, in the major laboratories like Livermore, unique capabilities for data manipulation and for the development of instrumentation.

We have, on the other hand, unique capabilities on the part of isolated faculty members in many universities across the country who, once the protocols are established—once the instrumentation is developed, can make very important contributions to the overall task.

Senator GORE. I had the first hearings some eight years ago on the effort to map the human genome, and one of the witnesses compared this effort to satellite photography and said that in the early days of satellite observations, we could make out the outlines of the continents and the oceans.

And then as the resolution improved, we could see the major river systems and mountain ranges. And then as the resolution improved further, we could see cities, and then large interstate highway systems, and smaller towns.

And now it is to the point where we can see the driveways and soon the mailboxes and whether the flag is up or down. And at the present time, the comparable effort with the human genome shows us the continents and the major river systems.

And we are approaching the resolution of highways, and we know where a few of the mailboxes are, but not many. But soon we will know where every single gene is and whether the flag is up or down—whether it is turned on or off. And when that occurs, the consequences for our understanding of health, the nature of the human species, the ability of science to intervene in a wide range of problems will be dramatically changed.

Other nations seem to agree. Japan and several European nations have begun efforts to map and sequence the genome.

Should the United States seek to encourage and become involved in international cooperation to carry out this task?

Dr. **Bromley**. I believe that we can, with profit, work with our friends abroad. But I think that in this case there is, clearly, a U.S. leadership role that is important. We can invite other countries to join us—to bring their talents, devices, what have you, to bear on the problem.

But I think it is important for us to maintain the leadership role—to give direction to the overall project. If we try to do things as a totally international group activity, there is a tendency for them not to move forward as expeditiously as they might.

Senator **Gore**. Well, whether we do it in cooperation with other nations or not—whether we play the leading role or not—whether we conduct this project by emphasizing the national labs or individual researchers or both, it is, in any event, moving forward, and will, in any event, be accomplished, and we can now foresee that the kinds of new abilities I referred to a moment ago, will bring with them questions of unprecedented difficulty.

Dr. **Bromley**. Yes.

Senator **Gore**. Bio-ethical questions, questions that we are not really prepared yet to answer.

What is your view on the best way to address those questions and problems?

Dr. **Bromley**. I think that the questions that you have raised, Senator, are symptomatic of a whole set of problems to which we, in science and technology, are beginning to face up. Questions which sound, on their surfaces, as if they really were matters of science and technology, but when you look at them more closely you find, that what limits our action is our lack of knowledge of the social, the behavioral, the economic consequences of the various courses of action that science and technology may seem to suggest.

What this indicates to me is that we are really all in this together, and it is long past time when we made more common cause than we have among the social scientists, the humanists, and the physical scientists and engineers.

For that reason, for example, I want to break a little with tradition and have members of my staff at OSTP, who are trained in the social sciences, and to have a member on the President's Council of Science and Technology Advisors with a social science background. I believe that only by working together, can we really address these problems that transcend the boundaries of science and technology, per se.

Senator **Gore**. Well, I think that is a good, first step and may lead to other steps that might eventually bring us to a solution for this problem, but it is a very deep problem and one we must find a way to solve.

Do you agree that science, itself, has led us to a kind of technological hubris in which we allow these new capacities to develop before we give any serious attention to how we are going to handle them and deal with them?

Dr. **Bromley**. I do not think I would lay it at the doors of science, Senator. I would say, instead, that we still are showing signs of our frontier past—that there has been a tendency throughout the history of this nation that when a new technology was available, we tended to implement it. It was, "damn the torpedoes and full speed ahead"!

I believe that we are finally beginning to learn, as some of the side affects of technologies that we have not fully understood, are coming back to haunt us, just how important those side effects can be.

Senator **Gore**. I believe that we are getting a little theoretical here, and I am going to come back to the specifics.

But just to pursue it, briefly, I agree with your observation. But I also believe that the scientific revolution, itself, led to a kind of Heisenberg principle writ at large.

That by systematically observing every aspect of nature and, scientifically, analyzing it in its component parts, we imperceptibly, but profoundly changed our relationship with nature itself, and created a tendency to lose sight of our place within nature. We've lost the perspective from which we used to understand more easily the interrelated nature of some of these problems, which now seem impossible to resolve.

In any event, OSTP, because it plays a lead role in coordinating science policy, must, in my view, devote increased attention to the development of new ways to address these larger questions of our place within the changes that we are creating.

Before we leave biotechnology—take a minute to give us your thoughts about the ~~O~~STPs role in the U.S. biotechnology program as a whole.

In addition to its traditional role in guiding the science, OSTP is also the designated government agency with jurisdiction over the BSCC—the Biotechnology Science Coordinating Committee, and over the coordinated framework for regulation of biotechnology.

These are probably the two most important policy and regulatory mechanisms that will guide the future of biotechnology in this country.

How do you believe these institutions have developed so far, and what role do you see for OSTP in the future development of biotechnology?

Dr. **Bromley**. To go back, briefly, in history, sir, I think that OSTP really played a relatively small role in biotechnology until such time as Dr. Bernadine Healey came aboard as Deputy Director.

Dr. Healey is a distinguished cardiologist and physician and played a central role in getting the coordinating committee established.

As you know, sir, she then left the Washington area, went to Cleveland, and on her departure I am afraid that the conditions of low staffing to which you, yourself, just referred, sir, made it difficult for OSTP to fully discharge the responsibilities that had been assigned to it.

It is for that reason, among others, that I am very pleased that the President plans to nominate a very distinguished physician as one of the OSTP Associate Directors—and, obviously, that individual will be expected to pick up the pieces and really try to do the best possible job with the BSCC and the mechanisms that are in place.

If those mechanisms are not sufficient for the task, and this is a rapidly changing and growing area, then, of course, we will, in consultation with our colleagues in the administration and with you in the Congress, try to come up with something better.

Senator **Gore**. Well, very good. I want to add my compliments to the work that she did, and she did, in fact, leave a void that was never filled by your predecessors there. That is most unfortunate, because if you have to pick only a few developments that are the most important developments in science and technology, you would have to include among the top four the revolution in genetics and biotechnology. Biotechnology, the revolution in computers, the revolution in our understanding of earth sciences and especially global climate change, and the continuing effort to resolve the nuclear arms race, are the four leading challenges of the scientific and technological revolution, in my view.

Now, we have been ignoring one of the critical issues in biotechnology involves the public's concern about intentional release of genetically-modified organisms. We really have not had a guiding hand there.

Despite a safe record regarding the release of these organisms into the environment thus far, and despite the fact that the early experiments posed risks that were significantly less serious than some of the critics alleged, justified concerns persist about the eventual affects of releases now in the planning stage.

Many scientists and environmentalists have pointed to the lack of risk-related research being conducted by agencies like USDA and the EPA. The lack of a sound, scientific base on which to conduct ecological-risk assessment, has caused delays in approving commercial applications of biotechnology.

Should OSTP take the lead in promoting such research and in establishing national and international databases for ecological-risk assessment?

Dr. **Bromley**. Well, Senator, I believe that OSTP has started in this direction. As you may know, the BSCC commissioned the National Academy of Sciences to develop a detailed report—this is in preparation at the moment—on the possible consequences of the release of genetically-altered micro-organisms and plants into the environment.

Something that is being considered at the moment is asking the Academy to expand, or perhaps do a companion study that would have to do with the possible consequences of the release of transgenic animals.

These reports—if they are of the quality that I believe we can expect from the Academy—will, provide the basis for a much broader, more strategic consideration of these questions than has been available thus far.

I agree with you that these are critical questions and that they deserve careful study. And, certainly, OSTP will devote significant energy and time to taking a look at them.

Senator **Gore**. Very good. It is my understanding that records and minutes of many BSCC meetings and communications simply do not exist. And there have been only a few public meetings in four years—maybe three in four years.

Dr. BROMLEY. I am afraid, sir, that was not on my watch and I have no detailed information.

Senator GORE. I understand. But let me ask you about the future. As head of OSTP, would you assure us that more public meetings will be held and that more formal records of BSCC meetings and communications will be kept, and that, unless they contain confidential business information those records will be made available to the public. We want to see the BSCC fulfill its responsibility to involve the public at large in a discussion of these issues so that we might promote a better understanding of what is involved.

Dr. BROMLEY. I would certainly want the committees operating under OSTP to satisfy all the requirements of the freedom of information laws.

Senator GORE. Now, we in the Congress have established a biomedical ethics board, an advisory commission. But it is under stress, in part because of the politically-charged nature of many of these questions lead to very little movement. They may—in fact they do—have an uncertain future.

But, in your view, do you believe the Congress would be advised to explore these questions in a systematic way so as to promote public understanding?

Dr. BROMLEY. I think in terms of public understanding that it is all to the good. I have no question about that.

Senator GORE. Okay. Promoting Congressional understanding is a goal too. I do not understand a lot of these issues and I feel the need for a systematic exploration of them.

I am going to have more questions for the record—detailed questions about the role of the BSCC and OSTP in this area.

And then in the fall, in addition to the hearings that I mentioned on science policy, we are going to—after that we are going to follow up with some more detailed hearings on biotechnology policy as well.

Now, let me return to the question of climate change. You ended our last interchange by saying that significant uncertainties surround the rate of change and the regional impact of change. I agree with you.

We have had personal discussions on this and I am using those as background for this question—do you agree with me that, although there are these remaining uncertainties about the overall rate of change and the specific regional impacts, that we, nevertheless, know enough now to conclude that on a global scale, changes are certain to take place because of the continuing accumulation of man-generated greenhouse gases?

Dr. BROMLEY. Yes, Senator. I believe that the scientific community, generally, as well as I, as an individual, would agree that if we continue to put greenhouse gases into the atmosphere—at anything like the present rate—that we will, unquestionably, end up with global warming. I do not think there is much question about that.

Senator GORE. All right. Now, let us examine the premise of your statement. If we continue putting greenhouse gases into the environment at anything like the present rate, do you agree that we are certain to do precisely that, at least for the next couple of decades?

Dr. BROMLEY. I see no way that we can avoid it, particularly, as the Third World exercises their, quite understandable desire to improve their quality of living. This is going to involve the burning of fossil fuels. They have, really, no option.

Senator GORE. Now, the changes that come from greenhouse gases—they come about primarily because of human activity, correct?

Dr. BROMLEY. I do not know that for certain, sir. I have not spent enough time in the field myself. I know that there have been questions—for example, in trying to explain why it was that global temperatures increased for the first 40 years of this century—then decreased for 25 years, and now have been increasing again—rather dramatically, in fact, in recent years.

And so, I really cannot—from my own information, answer that question with any degree of certainty.

I have read papers by reputable experts who have argued on both sides of the issue.

Senator GORE. Let me try to phrase it a different way. If we, in our civilization, doubled the pre-industrial levels of carbon in the atmosphere, do you believe that that would cause dramatic changes in the earth's climate and climate patterns.

Dr. BROMLEY. If we doubled the pre-industrial—which would get us up to somewhere in the range 550 to 600 parts per million, we certainly would be on the edge.

But the calculations with which I am familiar suggest that we could, in fact, take considerably more than that before we had dramatic consequences.

Senator GORE. Say the last part of that again.

Dr. BROMLEY. The calculations with which I am familiar suggest that one would require more than doubling the pre-industrial level before one had dramatic consequences.

Senator GORE. Well, I would urge you to revisit that conclusion.

Dr. BROMLEY. I will be happy to do that.

Senator GORE. I am not a scientist, but having engaged in dialogue with scientists on this question for quite a large number of years, and having conducted hearings on the question for nine years now, I disagree with that conclusion based on their feeling.

Dr. BROMLEY. I will be happy to look into it, sir.

Senator GORE. If you wish to supplement your response for the record, I will hold the record open for that. And let me note that the figure—the doubling figure that is so frequently used, is really for purposes of convenience to allow different scientific groups to play from the same sheet of music and compare the results of their modeling.

And quite a few scientists believe that the arbitrary nature of that figure leads to an erroneous, popular view that we have to reach doubling before significant changes are caused.

To say that we might have to go further than doubling before significant changes are caused, I think, as I said earlier, is a conclusion I disagree with.

Now, you mentioned uncertainty and the way uncertainty must be handled. Public policy makers are vulnerable to expressions of uncertainty on the part of scientists. And you as the President's science advisor will be asked on numerous occasions about how certain we are that a particular scientific conclusion is valid. If the response to that conclusion is difficult for the political system to absorb, then even small uncertainties will be seized upon as excuses for inaction.

If the action avoided is absolutely essential, and if by delaying that action, we lose the opportunity to respond at all, then the consequences of inarticulately expressed uncertainty are vast, indeed.

Do you understand—the point I am making?

Dr. **Bromley**. I agree. I understand the point completely.

Senator **Gore**. Well, the committee——

Dr. **Bromley**. It requires judgment, sir, as well as the raw, cold data.

Senator **Gore**. Correct. And I am gaining more and more confidence in your judgment.

The Committee on Earth Sciences is attached to OSTP.

Dr. **Bromley**. It is a committee of the Federal Coordinating Council for Science and Technology. Yes, sir.

Senator **Gore**. Now, the committee on Earth Sciences has put its name to this book entitled, Our Changing Planet?

Dr. **Bromley**. Yes.

Senator **Gore**. It was, according to informal reports I have received from within the administration—really authored by the Office of Management and Budget. They have a lot of good people over there——

Dr. **Bromley**. I am afraid that is an overstatement, sir.

Senator **Gore**. Okay. I welcome clarification. I had been given to understand that OMB had the major and overriding influence in the conclusions expressed.

Dr. **Bromley**. That is a very distinguished group led by Dallas Peck, who is a distinguished scientist from the Department of the Interior.

And so, although I am sure that OMB played a role, I think that perhaps it is overstating it a bit.

Senator **Gore**. Fine. I do not know the degree to which OMB has done this. I merely say that I have had that report.

Now, in light of the discussion we had just a moment ago, about scientific uncertainty and the manner in which it is expressed and political responses to information given by scientists to policymakers, let me just read you excerpts from this report, which I believe mislead policymakers—perhaps inadvertantly. Well, certainly, I am sure it is inadvertantly—into a false calm about the problem.

The number one conclusion in the executive summary about global change is that these changes "may stem from natural processes that began millions of years ago. Responding to these changes without a strong scientific basis could be futile and costly."

"Although human activities may have the potential to alter the earth's system, it is clear that variations occur naturally over a wide range. The potential for future global warming and the relative contributions of natural processes and human influences are still poorly known."

And right before that, "global warming has occurred in pre-industrial eras."

Now, those statements, selected from various points in the report, together convey an impression that the Committee on Earth Sciences believes that this is really a kind of speculative proposition, and that the nature of the uncertainty surrounding this question is such that our first conclusion must be to alert the country and the Federal Government that responding may be futile and costly.

I think that is a disservice. I really probably should not state it that strongly because I do not want to appear to impune the motives of those who wrote this. It is a matter of some subltety. And the emphasis they put on the various aspects of it is open to some debate.

But I really believe that the effect on policymakers is to induce false relaxation and an unwise emphasis on merely improving the information available to us to the exclusion of beginning a coordinated response strategy now.

I would give you a chance to respond to that expressed concern.

Dr. **Bromley**. Well, I would certainly be happy, Senator, to go back and talk with the Committee on Earth Science, first of all—to make sure that they are aware of your feelings on this.

Secondly, I think that the Committee on Earth Science would not at all wish that they certainly do not intend to—in any way, preclude our getting on with some very important business here.

It seems to me that we do know enough at this point to move forward with quite a variety of things—things which we might not do, specifically and only because of our worries about the greenhouse effect, but things that will certainly help toward ameliorating the greenhouse effect and which have other benefits, as well.

For example, I think that we should be working very hard at this moment to try to preserve as much of the tropical rain forest as we have left, first of all, because we are destroying enormous quantities of the gene pool that is our heritage from 4.5 billion years.

Incidentally, this will also have a very marked effect on the greenhouse phenomenon. I think also that we can go much farther than we have on energy conservation, because, again, for just the reasons you alluded to earlier, our energy consumption, at least in the short term, is irretrievably tied up with worsening of the greenhouse gas situation.

Those are two areas.

Reforestration is another area that has all sorts of environmental benefits, in addition to what it will do for the greenhouse effect.

So I see a whole series of actions that we and our friends abroad should make common cause on, and we should do it now, get started. There is no reason at all to wait—in fact, there is every reason not to wait. Because if we wait 15 years, we will not have any tropical forests left at the present destruction rate and that would be a tragedy of the worst sort.

In parallel, there are some specific things that I would be most interested in seeing done in the research area. First, one of the major areas of uncertainty, it seems to me, reflecting less than complete knowledge by a long sight, is the behavior and effect of clouds in the climate models that we use.

Second—tied very much to your earlier comments, sir—if we had more powerful computers, if we had better networking, then we could begin to think about making our model pixels smaller and we could begin to stop averaging out the Rocky Mountains, and averaging out the Gulf Stream, and things of this sort that really throw into question what comes out of current models.

The reason we are not doing it now is simply because we do not have fast enough computers and we do not have enough people associated with them to really do the job that has to be done.

So I see a tremendous amount to be done starting now.

Senator **GORE**. Well, I welcome that statement. In other words, you believe that it is scientifically advisable to begin actions now to preserve the rain forests?

Dr. **BROMLEY**. Exactly.

Senator **GORE**. To reforest areas that can be reforested, and reduce carbon emissions?

Dr. **BROMLEY**. And methane. Yes, methane, CO_2, ozone, the whole series.

Senator **GORE**. Okay. Let me just clarify this one more time. You believe it is scientifically advisable to begin efforts now to reduce emissions of carbon dioxide, methane and chlorofluorocarbons?

Dr. **BROMLEY**. The chlorofluorocarbons are a special case——

Senator **GORE**. Although, let me leave that out for a minute. Well, let us come back to that.

You believe it is scientifically advisable to begin actions now to reduce carbon dioxide emissions and methane emissions?

Dr. **BROMLEY**. I would not put it quite that way, sir. I would say that I would—I do not want to fence with you on this——

Senator **GORE**. No. But I mean, I think that is—I am not trying to trap you—but I want you to say it clearly. I think it is the correct conclusion. I think you do, too. And here we get back to the Koop model again.

What kind of science advisor are you going to be—when you know something is right—are you going to self-censor and avoid saying what you know. You have an opportunity to surprise, astound, enlighten, teach, you can do a lot of things.

Do you think it is scientifically advisable for us to begin actions now that are designed to reduce emissions of carbon dioxide and other greenhouse gases?

Dr. **BROMLEY**. Let me very specific about it. I believe that it is certainly time for us to engage in energy conservation, to reduce—to have the effect of reducing the greenhouse gases. But, frankly, at this moment, I am not convinced that the most compelling argument for doing it is reducing the carbon output.

I think that we really have a set of other reasons, which are perhaps more compelling at the moment, for engaging in energy conservation and reducing our burning of fossil fuels.

You see, I have not yet had compelling scientific evidence that convinces me that the greenhouse effect is the dominant reason.

Senator **GORE**. I find myself for the first time in this long hearing disappointed by the response that you have given.

You are more willing to express the urgency of saving rain forests than in reducing carbon emissions?

Dr. **BROMLEY**. Yes, I do. Because I feel that the loss of the gene pool is an absolute tragedy.

Senator **Gore**. I agree it is a tragedy. But I also note that the burden of saving the rain forests falls on the Third World, whereas the burden of reducing carbon emissions, at least at this point in time, falls primarily on us.

Leadership from the First World cannot really be offered without building some moral authority, by facing the problems that are ours to solve.

And I am concerned about your response on the advisability of beginning to reduce carbon emissions because of their role in producing the greenhouse effect. I note that you believe that we should engage in energy conservation for other reasons, and that, in my eyes, partly rehabilitates your response.

But I do want to express the strongest possible concern about the first aspect of your response and urge you, as you have already said you will do, to look more carefully at the scientific. And I note your acknowledgment that you have really not taken the time to get up to speed on that particular question.

Dr. **Bromley**. May I also add, Senator, that I have every intention of asking the President's Council of Science and Technology advisors, to take, as their first task, an in-depth look at this matter, because in the process I, too, will come up to speed.

Senator **Gore**. Well, that is good.

Now, we talked earlier about how the Committee on Earth Sciences is producing an implementation plan which will chart a long-term research strategy. When will that be publicly available, and might I be able to get a draft copy of that report, along with the computer report?

Dr. **Bromley**. I believe that would be possible, sir.

Senator **Gore**. Today?

Dr. **Bromley**. I believe we might get it for you this afternoon.

Senator **Gore**. Okay. Good. We are back on track.

Dr. **Bromley**. But I am fresh out of reports.

Senator **Gore**. Pardon me?

Dr. **Bromley**. I am fresh out of reports at this point.

Senator **Gore**. Okay. All right. Very good.

One other point before we close out this issue. I just want to call your attention to the way another politically sensitive, scientific issue was handled by the last administration. Acid rain.

Action to address acid rain was put off because the administration asserted that there was significant scientific uncertainty about cause and affect.

I believe that that uncertainty was magnified beyond reason, blown out of all legitimate proportion because the administration anticipated the political difficulty of the response that would be clearly indicated in the absence of such uncertainty. To quote the administration, they said it "needed to establish the scientific basis of acid rain."

Well, the scientists who were most familiar with the evidence had very little doubt that we already knew what caused acid rain. But, because the uncertainty was exaggerated artificially, the indicated response was for more research, which in itself is good, but when offered as a substitute for action, is unfortunate.

And they created the National Acid Precipitation Assessment Program, NAPAP.

This book seems to imply that the administration now plans to NAPAP global climate change.

I do not believe they will. I think that Bill Reilly and others who feel as I do about that problem, will ultimately be successful in moving the administration beyond that.

But I want you to look so carefully at the data so that you will end up on the right side of that debate.

And, of course, in the acid rain debate, a Canadian scientist certainly had no doubt about it at all.

Well, perhaps it is time to submit the additional questions for the record.

Let me just share a few brief thoughts in closing.

First of all, I would like to thank you for your patience in answering these questions and in your agreement to respond to the other questions for the record, both from myself and from other members of the committee.

I look forward to working with you. I know my colleagues feel exactly the same way.

We will move expeditiously to report your nomination to the floor. One should never presume to speak for the Senate as a whole, but certainly on the basis of the record compiled in this hearing, I would foresee, what I predicted at the outset—a very speedy approval of your nomination. And I think the nation is fortunate to have someone of your caliber in this position.

Again, we will revisit the questions that we began exploring today with the hearings in September.

Other questions such as science fraud, new institutional arrangements, combining corporate funding with federal funding and foreign funding in financing research, will be explored in those hearings.

Biotechnology, advanced computing, networking, global climate, life sciences, and the other questions that we have proposed here on priorities and science policy across the board, will be explored at length in those hearings.

And is it safe to say that you would be willing to come back for that examination of issues later on?

Dr. **Bromley**. I would be happy to do so.

Senator **Gore**. Great. Well, I will certainly look forward to it. And, again, my best wishes to your family as you begin this new set of duties, and we wish you well.

Dr. **Bromley**. Thank you.

Senator **Gore**. This hearing stands adjourned.

[Whereupon, at 12:54 a.m., the hearing was adjourned.]

[The following information was subsequently received for the record:]

DR. D. ALLAN BROMLEY

ADDITIONAL POST-HEARING QUESTION FROM SENATOR HOLLINGS

Question: Geographic diversity in research - I feel strongly that there is a strong geographic correlation between university research activities in science and engineering and economic development. In other words, strong research universities in science and engineering serve as effective magnets for economic development.

o Do you agree?

Answer: Under very special circumstances there can be a very strong correlation between the location of the nation's major research universities and the development of active engineering and entrepreneurial centers, but this is not always the case. These centers collect around the research universities because of the anticipated professional interactions, the educational opportunities available to employees and the general ambience and cultural activities of these special universities. M.I.T. and Route 12B; Stanford and Silicon Valley; Duke, North Carolina and the Research Triangle are outstanding examples.

o Every major research university in the U.S. depends heavily on grants and contracts from the Federal government. But, that Federal money is not spread evenly. The top 5 states get over 50% while the bottom 15 states get less than 2%. Do you envision a role for OSTP in helping address this imbalance?

Answer: It is certainly true that every major U.S. research university derives substantial grant and contract support from the Federal government; only in this way can their faculty members gain access to the research frontiers.

It is again far from accidental that these funds -- specifically awarded in support of research -- should be nonuniformly distributed. It has been U.S. Federal practice since World War II to select recipients of federal research support on the basis of excellence -- excellence as judged by peer review -- and this mechanism has given us the world's strongest science and technology enterprise by far. Purely as a criterion for allocation of research support I know of no better criterion; it works!

But as your question illustrates, research is not our only goal. It is known that something like 75% of our youth in the U.S. attend college within 50 miles of their birth place and we as a government have an obligation to see that they have access to high quality educational institution.

One of the American myths is that the Federal government has not been supporting higher education but only university based research. But our universities have demonstrated beyond much question that education and research are inextricably intertwined and inseparable; they are also synergetic. And, in fact, the federal research support has been supporting higher education albeit indirectly.

It is also true, as evidenced by your question that strong university research can attract not only more such research but also local economic development. This is a serendipitous effect and thus, indirectly, a secondary goal of funding R&D in the university system.

But nothing could be more counterproductive than the support of poor quality research since it in turn leads to low quality education and attracts no significant economic development. OSTP takes as an important responsibility supporting excellence in smaller institutions intent on improving their research activities. This will lead to the creation of new centers of research excellence in areas of the nation where none now exist.

o Dr. Bromley, I hope you would look closely at a very small pilot program at NSF which has made valiant strides in this area. It is called the experimental Program to Stimulate Competitive Research (EPSCoR) and with modest funding it has achieved remarkable results for 15 or so disadvantaged states. Do you think that other Federal research agencies should establish similar programs?

Answer: The EPSCoR program at NSF is a very interesting example of a working relationship between a federal agency and the states to promote increased national competitiveness of research conducted within those states. Over the last ten year, NSF has spent $43 million. This has resulted in leveraged matching funds of $148 million from states and private universities. There are EPSCoR committees in each of the 50 states with representatives from the governors' offices, university presidents, CEO's, state secretaries of Commerce, and nationally recognized researchers. These EPSCoR committees are a primary reason for the interest this program has generated. It is the local commitment that certifies the quality of these activities. I believe that any expansion of this concept to include other agencies, if feasible, must seek to make use of this existing coordinating infrastructure, if they are to be successful, and that expansion of the NSF program to other agencies merits study.

DR. D. ALLAN BROMLEY

POST-HEARING QUESTIONS FROM SENATOR INOUYE AND THE ANSWERS

Question: An assertion was made by the science press (The Scientist, April 3, 1989) that major issues facing the nation and the Bush Administration in the current decade and in decades to come have a predominantly biological and behavioral/social science focus. Concluding that ecological and health problems will require increasing attention.

As a physicist, how will you deal with the new generation of science and technology concerns beyond physical science components?

Answer: President Bush has agreed that should I be confirmed, I will be able to name four Associate Directors for OSTP that he will recommend for confirmation to the Senate. My recommendations will focus on bringing together four very senior, highly qualified individuals from different disciplines who will also constitute a collegial group of generalists. Together, we will interact in the closest possible way to formulate policy alternatives spanning all the issues in areas ranging from physical sciences, engineering and the life sciences, through environmental science and ecology, public health, education and training, national security, space, energy technology and information science and technology, to industrial technology and international science and economic competitiveness.

While I have worked myself, briefly, in biophysics research and while the instrumentation, data handling and concepts of the physicist play increasingly important roles in biology and biotechnology, I shall move expeditiously, if confirmed, to have a very distinguished physician, with broad experience in biological and biotechnological matters, nominated by President Bush as one of the four OSTP Associate Directors approved in the 1976 OSTP founding legislation. I shall also appoint an Assistant Director for Environmental Sciences and, if my budget permits, an Assistant Director for Social Sciences.

Working together, I am confident that we can provide the coordination and analyses that both you and the President have every right to expect in this very important area of science and technology.

Question: In public comment, you have stated (The Scientist, May 29, 1989) that there is a conceptual incompatibility between the so-called natural sciences and the behavioral and social sciences but that the latter are crucial to solving most of the current pressing technical problems.

How do you respond to the criticism, then, that it is impossible for a scientist from a specific discipline to be adequately prepared to represent and comprehend the breadth of contributions by various disciplines on any given issue?

Given your background, do you feel secure that you will be able to make sound decisions involving the other science disciplines, and cognizant of their contributions?

Answer: Increasingly it is true that problems of major societal importance -- such as the rising cost of medical care, the dangers of nuclear war, the scourge of famine in the Third World, the deterioration of the global environment, to name only a few -- problems that are frequently laid at the doors of science and technology, require much broader approaches. When closely examined, it is frequently the case that while the science and technology are largely in hand, it is the lack of adequate understanding of the possible economic, behavioral and social consequences of the possible courses of action that science and technology may suggest that blocks adequate response.

What is required is much improved communication among experts in all these areas if we are to obtain optimal recommended action and policies.

It is for this reason, as noted in my answer to Question 1, that I wish to add an Assistant Director for Social Sciences to the OSTP staff and that President Bush and I have agreed upon the addition of a distinguished social scientist to the membership of the new President's Council of Advisers on Science and Technology (PCAST). They will have much to contribute.

Finally, I should perhaps add that in my own case for the past decade I have taught a formal Yale course entitled "Science and Public Policy" that was open to both senior undergraduates and to graduate students and that, in subject matter, spanned the entire range of major societal problems having scientific and technological components.

I believe that, working in close collaboration with a diversely experienced, high quality OSTP staff and drawing on the scientific and technological communities, through mechanisms such as PCAST, we can, indeed, make sound recommendations involving scientific disciplines other than my own and be duly cognizant of the needs and contributions of those disciplines.

Question: What are your relative budget priorities across the various scientific disciplines and technological areas?

Answer: On the basis of extended discussions with senior members of the Office of Management and Budget, specifically including Messrs. Darman and Grady, we have reached an agreement that in the development of future year Presidential budgets, OMB and OSTP staff will collaborate at all stages of the process -- to a much greater extent than previously. That will allow OSTP to carry out its coordination and crosscutting analyses as the budget evolves and also have an opportunity to participate with OMB and with the federal agencies, in the development of priority decisions as the budgets evolve.

In his February 9, 1989 statement, "Building a Better America," the President listed a number of his highest priority issues involving science and technology. Among them he included the global environment and its protection, the need for improved public health care and its delivery, the necessity of improving American economic competitiveness, the growing shortfall in American education and training -- both in quality and quantity -- the necessity of maintaining a strong national security posture in a rapidly changing world, the challenge of maintaining American leadership in space and the need for increased investment in basic research and in pushing forward the research frontier.

Should I be confirmed, I shall -- with my staff -- devote our efforts to providing the President and, where appropriate, the Congress with the best available objective science and technology input to the resolution of such issues.

Although it would be premature for me to attempt a detailed answer to this Question at present since there are many areas as yet on which I have not been adequately briefed, one of my early priorities, if confirmed, will be the preparation of the annual OSTP science and technology policy package for presentation both to the President and to the Congress.

Question: As you are aware, the Pacific Basin comprises a majority of the U.S. Exclusive Economic Zone (EEZ). I would like to know your plans or priorities in enhancing and developing the resources of the Pacific Basin EEZ.

Answer: I am not really conversant with the needs and potentials of the Pacific Basin EEZ at this time. However, I certainly stand ready to assist the President in any way that is appropriate to the mission and mandate of the OSTP, to achieve national science and technology goals in this area of the world.

Question: The National Science Foundation (NSF) is currently exploring international cost sharing for an 8 meter telescope. This is to take the place of the National New Technology Telescope (NNTT) that was previously aborted.

I am concerned that these efforts will delay this project. Are you prepared to work with the NSF to put this project on track? Further, the original plan called for two 8-meter instruments; however, it appears that NSF is proceeding with one at this time. What are the plans for the second instrument? Lastly, will you support the necessary funding for this project?

Answer: As I have previously stated, international cooperation on science and technology initiatives is extremely important both now and in the future. Especially on the basic research end of the spectrum and with respect to an array of "big science" projects, the world's great industrialized nations must recognize the benefits of working together. This strategy makes sense for both scientific and financial reasons. The 8-meter telescopes project appears to be an excellent example of a project that will benefit from international cooperation.

The NNTT concept consists of four 8 meter mirrors mounted together in a single telescope. In consultation with the scientific community, the NNTT has been deferred, in part to allow the technology for the individual 8 meter mirrors to be proven. The NSF anticipates receiving a proposal from the National Optical Astronomy Observatories for two 8 meter telescopes (total cost of $135 million in 1989 dollars) to provide coverage of both hemispheres. NSF is encouraging NOAA to seek international funding (approximately 50% cost-sharing). Currently, the U.S., U.K. and Canada are exploring such a cost sharing partnership. OSTP has not reviewed this project in any detail, and normally defers to the NSF on evaluation projects of this sort which require considerable peer review. However, the scarcity of good optical sites, and the international nature of optical astronomy is consistent with an approach calling for international cost sharing.

With respect to this particular project, I would have to speak with the NSF director, Eric Bloch, before commenting in any concrete way. I am, on the other hand, certainly prepared to help Dr. Bloch in any way he feels is appropriate on this or any other international initiatives important to the NSF.

DR. D. ALLAN BROMLEY

POST-HEARING QUESTIONS FROM SENATOR GORE AND ANSWERS

Question: Biotechnology Science Coordinating Committee (BSCC) -- OSTP published versions of the Coordinated Framework for Regulation of Biotechnology, a policy statement describing various federal agencies' oversight of biotechnology research products, in 1984 and 1986. In 1985, OSTP established the BSCC as a forum for officials from the agencies most involved in the implementation of the coordinated Framework. According to its charter, the BSCC was established to facilitate communication and cooperation among federal agencies concerning scientific issues, promote consistency in the development of federal agencies' review procedures, and identify gaps in scientific knowledge.

Under the first Chairman, Dr. David Kingsbury, the BSCC took an active part -- some say too active -- in developing the 1986 Coordinated Framework.

In response to criticism of the BSCC's role, Dr. Kingsbury testified to Congress that the BSCC would be a "coordinating" body and would not interfere with an agency's chosen path of rule-making except to provide its opinion on the scientific issues involved. Dr. Kingsbury specifically said the BSCC would not formally or informally communicate with OMB regarding an agency's rules.

This has changed dramatically under the BSCC's second Chairman, Dr. James Wyngaarden, of NIH. Dr. Wyngaarden wrote a letter to Office of Management and Budget administrator Jay Plager (attached) severely criticizing EPA's rules -- while the rules were still under consideration by OMB. Dr. Wyngaarden went so far as to ask OMB to delay considering the EPA proposed rule until the BSCC not only reviewed it, but approved it. Dr. Wyngaarden's approach, which has the active support of the White House Science Office personnel, prevented publication of the EPA rule for comment in 1988. This resulted in EPA withdrawing its representatives from the BSCC and establishing its own communication links with relevant agencies, making the BSCC's efforts as a coordinating body meaningless.

1) Do such actions overstep the BSCC's assigned role of promoting coordination among agencies?

Answer: As I understand the role of OSTP's FCCSET committees, they are an arm of the Administration through the OSTP agency. As such, they may help to develop Administration policy but, finally, their job is to implement the final policy decisions of the Administration. Thus, in the coordinating role each committee plays, it must make sure that individual agency decisions on particular issues conform to Administration policy. The Office of Management and Budget (OMB), has the same role. Thus it is entirely appropriate for the BEST to [illegible] and [illegible] the other policies to not simply continue to administratively [illegible], or other individual agency actions are not based on a consistent [illegible] with other Federal agencies concerned with responsibilities in the same area or issue.

The primary purpose of the BEST is to provide a sound scientific basis for policy decisions, rather than to be a policy making body. Scientific analysis is necessary to developing consistent [illegible] procedures and assessments across the various agencies. While it is important for all agencies to [illegible] consistent with a sound scientific assessment resulting from the interagency process, every effort must be made to ensure that agency positions are fairly represented, coordinated and addressed.

One of the functions of the BEST is to provide the best available scientific input to regulatory decisions. The oversight of the regulatory process, however, is the responsibility of OMB and the President, who has the authority under E.O. 12291 to resolve appropriate interagency conflicts. To the best of my knowledge, the BEST has not overstepped this assigned role.

Q3. According to the BEST's charter, OSTP's Federal Coordinating Council for Science, Engineering, and Technology is supposed to review the activities and continuing need for the BEST. Should the BEST be restructured or abolished? If not, what do you believe should be the BEST's focus? Should it focus on science, on policy, or both?

Answer: My very preliminary inquiries about the BEST committee have led me to the conclusion that the various agencies [illegible] needs to be restructured or abolished. [illegible]

Q4. How do you plan to restore the trust and integrity necessary for the BEST to perform an effective role in interagency coordination?

Answer: As just noted, it is not my current understanding that the trust or integrity needs to be restored in the BEST. [illegible]

BSCC operates in a fast-changing environment where consensus is not always readily obtained, it retains considerable respect from the various federal agencies. For example, the Department of Commerce has briefed the BSCC on the proposed rule, "Removal of Unilateral National Security Controls: Additional Controls on Chemicals and Biological Agents and Precursors," and has requested BSCC rrview.

In addition, the USDA has submitted to the BSCC the draft, "Guidelines for Research Outside Contained Facilities," for review and comment. Finally, the Industrial Biotechnology Association asked for BSCC review of their guidelines.

I believe that the effectiveness of any committee depends in large part on the trust that can be generated by its leadership. One of my priorities will be to see that the various FCCSET committees have and continue to have the best qualified leadership.

4) The Coordinated Framework continues to have sizeable regulatory holes. Despite considerate ongoing research in the genetic engineering of fish, for example, transgenic fish are only covered under the Coordinated Framework if they are part of a federally funded research project. Can such gaps be filled by modifying the Coordinated Framework? Or, should OSTP assist Congress in drafting new legislation to provide federal agencies broader or more clearly defined regulatory authority over biotechnology products?

Answer: Most of the agencies and committees that have briefed the BSCC committee have asserted that no new legislation is required for them to accomplish their tasks. On the other hand, the group that handles the Coordinated Framework area has asked for BSCC guidance to determine whether or not its scope of work is comprehensive and whether or not it could be more effective if it were a working group of the BSCC. When a consensus is reached by the BSCC, I would report immediately to your Committee, which clearly has an interest in this area.

5) The BSCC has held only a few public meetings in the four years since it was formed. Missing and poorly kept records of BSCC meetings and communications further hamper public participation in the BSCC's deliberations. Should representatives of the public serve on the BSCC?

Answer: I have been informed that the advisability of public members serving on the BSCC has been analysed and discussed extensively, from the very inception of this Committee. On the basis of these analyses and discussions it was decided to set up the BSCC as a FCCSET committee of OSTP. Therefore, by definition, there can be no public participation; FCCSET committees are staffed solely by full-time federal employees.

On the other hand, to take account of quite proper public interest and concern, open meetings are held on visible and argumentative issues as they occur. For example, in the public hearing held last July, 30 persons attended.

I am also told that in order to encourage free and frank discussion among the members of the BSCC itself, all meetings are confidential and no minutes of these meetings are kept. This I believe to be appropriate; I would not wish to alarm the public when "hypothetical, worst-case scenarios" are projected - and subsequently shown to be without foundation.

It occurs to me as an outside observer that currently the BSCC has its house in order and that we should let it proceed with the business it has to conduct. As with all such groups, should I be confirmed, I will continue to monitor it -- and all other FCCSET committees -- to be able to assure the Executive Office and the Congress that they continue to be effective and are carrying out their stated missions and mandates.

Question: Conflict of Interest in Science - The passage of the Technology Transfer Act, the legislation in the early 1980's, has encouraged federally-funded scientists to develop technology for industry. Such academia-industry collaboration may aid U.S. businesses. Critics charge, however, that scientific research is increasingly directed by industry's, not society's, needs. Many scientists' conflicts-of-interest now make it impossible for them to perform independent research -- from drug trials to assessments of environmental pollutants. And, these scientists cannot be objective members of government advisory committees.

Dr. Kingsbury of the National Science Foundation, and past Chairman of the BSCC, resigned from the government after it was learned that he failed to disclose several directorships he held in biotechnology companies during the time he was BSCC Chairman. He eventually settled with the Justice Department for $10,000.

1) How can we offer our scientific community large incentives to collaborate with industry and expect to retain a body of independent scientists? Under your direction, would OSTP develop policies that balance these needs? If so, how?

Answer: Scientists have collaborated with industry for many years. Most recuse themselves when there is a clear conflict of interest with the public policy issue under discussion. But scientists are like everyone else: some are trustworthy, some are not. It is the problem for public policy officials that they must, in important or possibly expensive policy issues, make sure that they and their staff attempt to interview a broad enough cross-section of the knowledgeable scientific community that the community consensus on the particular issue at hand can be obtained. This is certainly not easy and requires a knowledgeable staff, but in the end that is what the American people expect of high public policy officials. Should I be confirmed, I intend to be available to both the Executive Office and to the Congress to inform them of what my staff and I -- through individual briefings and PCAST Working Reports -- believe to be firm facts, scientific consensus, and our opinion on the best possible course for national and public policy directions.

2) What steps would you take to assure that appropriate attention is paid to the development of products that are of enormous societal benefit, either in this country or internationally, for example a product useful in the eradication of a tropical disease, but which industry my find financially unattractive?

Answer: I am unsure exactly where or in which areas products of enormous societal benefit are not being funded. Since passage of the "Orphan Drug Act" and the new AIDS drug policies adopted by the FDA in conjunction with NIH, it would seem that the most obvious areas of unprofitable research for U.S. industry has been addressed. Certainly, should other similar areas arise during the time I would be the Director of OSTP, I would elevate them to the highest levels of government in an effort to see that appropriate financial support and liability exemptions are provided to relevant U.S. industries.

Question: International Activities of Biotechnology - Establishment of internationally harmonized regulations for biotechnology is in the interest of U.S. industry. For the past several years, the European Community (EC) has solicited the opinion of the United States on how the EC should regulate environmental uses of genetically engineered organisms. Until this month, we failed to respond to their concerns in a formal manner as they had requested and expected.

The main obstacle to cooperating with the EC has been the chaos present in U.S. delegations to international meetings on biotechnology. Agencies with authority in specific areas, such as EPA, have been forced to clear their policies -- which are based on current U.S. law -- with other agencies with political clout in the Administration but no authority in the area under discussion. This has led to a stalemate which prevents the U.S. from influencing the direction of our trading partners in this economically crucial area. If this continues, the U.S. biotechnology industry will be the loser.

OSTP has been part of the problem by deferring too often to the State Department in matters of scientific policy and by supporting a "consensus" approach that lets the agencies without authority or expertise in an area exercise a veto power over agencies with authority. On some occasions, delegation members chosen by the State Department have actually proposed abroad policies that are not followed here in the U.S.

1) Will you take a more active role than your predecessors in responding to our trading partner's concerns in formulating scientific and regulatory policies?

Answer: In today's world, it is very important that we and our trading partners work towards developing a common approach to scientific and regulatory policies. This commonality cannot be obtained overnight. It requires an openness in considering the views of our trading partners and also effectiveness in communicating and fostering a serious appraisal of our views. If confirmed, I intend to pursue these goals. It is my understanding that OSTP and the BSCC committee hosted by OSTP have, in fact, taken a lead role -- where appropriate -- in responding to our international trading partners' concerns in formulating scientific and regulatory policies. For example, OSTP took the lead role in developing a consensus response to the European Community (EC) directives on the deliberate release of genetically engineered organisms, and OSTP, with the U.S. Trade Representative, has initiated talks with the EC to address the scientific methodology and techniques that will be mutually acceptable both to the EC and the U.S. Previously, OSTP coordinated the development of U.S. position papers to discuss biotechnology issues at the OECD meetings in both 1988 and 1989. I have also been told that the 1988 U.S. delegation was described by our discussion partners in the OECD as the best and most well prepared that the U.S. has ever fielded. Should I be confirmed, you can be assured I will attempt to continue this impressive tradition in the international arena.

2) Do you favor an approach in which a representative of the agency with regulatory authority in an area is the lead spokesperson at international meetings related to that area? Or, should the group leader be the Chair of the BSCC, the body designated to coordinate U.S. Policy?

Answer: The issue of who should be the lead spokesman at international biotechnology meetings cannot be answered in one unique way. Expertise in the issues under discussion, previous involvement in the issue or with a particular delegation, delegation composition, and dominant national interest with respect to the issue -- all enter into who, or what agency, is to be designated as delegation leader. Effectively, it is the President and his closest advisors who make this particular designation. OSTP will, should I be confirmed, continue to follow the ground rules for delegation designation that have served us well in the past and that foster the goals dictated by national policy concerns.

3) Will you take a more active role in promoting abroad scientific policies that conform with U.S. domestic policy?

Answer: Should I be confirmed, I intend to continue past tradition in that OSTP will support the policies and analyses of the President and his Administration in the application of U.S. domestic policy abroad. It is frequently not sensible to insist on following U.S. domestic policy abroad, for many reasons. Two among these are, first, that U.S. domestic policy is an implementation of the consensus of U.S. citizenry which may not necessarily be a question of moral issues. And, second, that to unilaterally restrict U.S. firms from competing in the international arena simply because U.S. policy precludes the necessary practices and products does not seem reasonable when such areas of competition clearly do not involve moral value judgments. On the other hand, should scientific information indicate that such non-domestic policies are definitely unhealthy, unsafe, or short-sighted on the part of our trading partners, I would press to ensure that this Administration would adopt international policies consistent with sound and safe business practices.

Question: Research - The Office of Technology Assessment reported that the federal government spent about $2.7 billion on biotechnology-related research in fiscal year 1987. Although the bulk of that funding came from the National Institutes of Health, biotechnology, by its interdisciplinary nature and broad application to many industrial sectors, cuts across many federal agencies. Twelve agencies fund substantial biotechnology research. Yet OSTP appears in the past to have made little effort to promote communication and planning between agencies. Only one modest research initiative in biotechnology, in Plant Science, came from OSTP during the last Administration.

1) How do you propose to ensure that gaps and needless duplication of research do not occur?

Answer: Over the years that I have been a research scientist, I have heard repeated assertions that there are either duplications of research or gaps in the research areas that are being funded. This is the only developed nation where research is dictated "bottoms-upward"; i.e. those who conduct the research dictate what research should be done. If an area is stimulating and has great imminent potential for breakthroughs, scientists apply to the appropriate R&D agencies to fund research in those areas. In areas where research is uninteresting to the active scientist, few if any apply for research areas. This is not to say that these latter areas may not contain the seeds of great usefulness; it is simply that the scientists who conduct the research are more interested in other research. Since our system has produced one of the most powerful R&D enterprises in the history of the world, I really do not believe that OSTP should attempt to convince scientists to change their priorities.

However, there clearly are some areas where previous research breakthroughs show great promise of either defense or commercial exploitation. It is in this arena that I believe that the Federal laboratory system can be asked to carry the research forward to a point where applications can be clearly identified and developed. Should I be confirmed as the Director of OSTP, I intend to monitor such cases and discuss them with relevant R&D agency heads in order for them to decide whether or not their agencies would become involved.

2) Despite the strong base in biomedical biotechnology research, other areas of .biotechnology, such as plant agriculture and environmental applications, are seriously underfunded. Application of biotechnology to agriculture has the potential to have enormous economic impact. Do you see underfunding of agricultural and environmental-related biotechnology research as a serious threat to the nation's future competitiveness? As the President's Science Advisor, what recommendations would you make to him in these areas?

Answer: I agree that research in the application of biotechnology to agriculture and environmental-related areas is of great potential impact, not only to the nation and to our nation's future competitiveness but also to the world. However, I am not aware that these areas are seriously underfunded; on confirmation, I certainly would look into this area. It has been my observation from the media reporting in this area that more than anything else it is a lack of national consensus concerning what is, or what is not, safe that impedes real progress. As I have noted repeatedly in both written and oral testimony, the most important aspect of the position of Advisor to the President for Science and Technology is to ensure that the policies of this nation are informed by science, when definitive scientific information is available. Investigation and analysis in biotechnology as it applies to agriculture and the environment will be one of my highest priorities and of my staff.

DR. D. ALLAN BROMLEY

POST-HEARING QUESTIONS FROM SENATOR KERRY AND THE ANSWERS

Question: It appears that the Bush Administration is pursuing many scientific goals simultaneously while not adequately funding them. We are now talking about a major new space program to go back to the Moon and on to Mars while we are still struggling to find funding for the space station and for less adventurous, but no less important, projects such as the Mission to Planet Earth.

Funding for the Superconducting Super Collider is progressing through the appropriations process while other civilian research funding languishes and college and university research facilities across the country are deteriorating.

Science and technology projects cut across the Federal government: the Defense Department, the Commerce Department, the Department of Education, the National Institutes of Health. We need to develop a comprehensive Federal research and development policy; that policy must recognize fiscal realities. As we struggle to reduce the deficit and work to make the economy more competitive in the international marketplace, it is important that we set high goals. But our goals must be attainable.

How do you see your role in the budget process? How can we improve the process by which we set Federal research and development priorities and policies?

Answer: As you know, Senator, the Presidential budget presented to the Congress early in each year represents the concatenation of a long series of priority decisions beginning at the working scientist level, passing up through the agencies and through them to the Office of Management and Budget. This nation is unique among those of the developed world in using such a "bottom-up" approach; it has, however, given us the strongest science and technology enterprise that the world has yet seen.

As you correctly note, however, federal science and technology budgets are under increasing pressure -- both internal and external. Internally, the costs of reaching and working on the frontiers of knowledge -- and of the instrumentation necessary to take researchers to these frontiers -- increases inexorably, and within anything like a fixed budget tend to squeeze out smaller, less visible -- though no less important - activities. Externally, since federal R&D expenditures currently constitute close to 25 percent of the discretionary component of the total federal budget, they are increasingly vulnerable to other initiatives that may have larger and more vocal and effective constituencies.

It is the joint responsibility of OSTP and OMB in areas involving science and technology -- working closely with the agencies -- to insure that whatever funding Congress decides to make available in a given year is expended with maximum effectiveness and efficiency in support of Presidential and Congressional intent.

After extensive discussions between OSTP and OMB staff -- at all levels -- we have agreed that in future there will be a much closer interaction between the two Offices, at all levels, throughout the evaluation of the outyear Presidential budgets than has been the case in the past. In this way the coordinating and crosscutting analyses with which OSTP is charged can be an integral part of the budget evolution -- beginning at the agency level. Tradeoffs within and among agencies are much more easily achieved at these early levels to permit better coordination of the overall federal S&T activity -- and clearer responsiveness to expressed Presidential and Congressional intent.

It is very clear that hard choices must be made and that all the attractive options that science and technology have identified cannot be pursued simultaneously. It will be my intent, should I be confirmed, to bring the external scientific and technological communities into these priority decisions to a greater extent than in the past using, for example, PCAST and its ad hoc Panels.

The final recommendations to the President and the Congress, drawing on all such information, will remain the responsibility of OSTP and OMB jointly.

THE GREENHOUSE EFFECT

by

D. Allan Bromley

I. INTRODUCTION

It is important to recognize at the outset that the **greenhouse effect** is nothing new, that it is extremely complex, and that our input to this effect in the past century, without our recognizing it, has embarked us on an enormous, unplanned, planetary experiment that poses unprecedented challenges to our wisdom, our foresight, and our scientific capacity.

The greenhouse effect is one that is familiar to almost everyone of us. Its most common and familiar application is that of the market gardener who uses it to bring the temperature of his greenhouses sufficiently above the ambient outside temperature to allow him to extend the growing season. But the greenhouse effect is much older than this. Indeed it is the greenhouse effect that is responsible for this planet developing in such a fashion that life has become possible on it.

In its simplest manifestation, the greenhouse effect results in trapping of some of the energy that reaches the earth from the sun — enough to raise its temperature to a range acceptable to carbon-based life. I shall return to this below.

Only very recently have we begun to appreciate the exquisite complexity of the chemistry and physics underway in our atmosphere as radiant energy from the sun — nuclear fusion energy — interacts with complex molecules in the upper atmosphere; molecules such as ozone, O_3, which shield out the ultraviolet radiation that would otherwise make the surface of the earth untenable to life, molecules like chlorine oxide, ClO, that are a new addition to our atmosphere and that catalyze the destruction of this ozone leading, for example, to the — recently discovered massive holes in the ozone layer that appear over the Antarctic — and now increasingly over the Arctic — and molecules like water H_2O and carbon dioxide CO_2 which are transparent to the incoming radiation from the sun but opaque to the radiation that the earth would otherwise reemit back into space. Beyond that, the situation is enormously complex because the greenhouse effect is obviously no respecter of national or political boundaries and its understanding demands information and analyses that span the entire globe. Only within the past very few years have we had the information handling capacity to even begin to approach so gargantuan a computational and information handling problem.

Those working in atmospheric sciences can well be excused from being reminded of King Alfonso X of Castile, a medieval patron of astronomy who, after much study, is reported to have said,

> **"If the Lord Almighty had consulted me before embarking on the Creation, I would have recommended something simpler."**

It is well to remember that significant scientific study of the greenhouse effect began only during the International Geophysical Year (IGY) of 1957-1958 and public interest and concern about the effect is, of course, much more recent having peaked dramatically during the summer of 1988 as a consequence of the extensive droughts in the Middle West and the unusually high temperatures experienced across the continent. Charles Keeling of the Scrips Institution of Oceanography in La Jolla, California was the person most responsible for the greenhouse component of the International Geophysical Year program and, in particular, for setting up the two primary measuring sites for atmospheric carbon dioxide. One is near the summit of Mauna Loa on the island of

Hawaii and the other is at the South Pole station of the US Antarctic program. These measuring sites have been used continuously since their establishment and provide us with the basic CO_2 data that we have today. More recently they have been augmented, of course, with a great many measuring sites worldwide but the Mauna Loa data, in particular, provide us with the most direct evidence for the fact that mankind has, since 1850, put something like 650 billion tons of carbon — in the form of carbon dioxide — into the atmosphere of this planet. By a very large margin this is the largest impact that man has had on Spaceship Earth.

The consequences of this massive global experiment are still far from certain but the combination of better data, better models, better computers, and greatly increased public interest has made it possible for us to begin to see some of the inevitable consequences, at least in broad outline. These consequences are staggering and almost beyond question will have significant effects within the lifetime of our children and massive, if not indeed, catastrophic effects within the lifetime of our great grandchildren.

II. UNDERLYING SICENCE

Let us begin then with some very elementary physics — all that is required to understand at least the outlines of the greenhouse effect. The wavelength of any radiation depends directly on the temperature of the source that emits it. The radiation coming from the Sun, for example, is 20 times shorter in wavelength than that from the earth; that from the sun has its energy peaked in the visible range of wavelengths whereas that from the earth is in the infrared. Moreover it is well known that the intensity of the radiation — that is the amount of energy carried by it — is proportional to the fourth power of the temperature (T^4) of its source and it is this sharp temperature dependence that makes the balance on which we depend for regulation of the earth's temperature such a sensitive one. Clearly at balance, all the energy reaching the Earth from the Sun must eventually be reradiated into space otherwise the temperature of the Earth rises until this balance is again established. The original equilibrium was established many millions of years ago and since the energy output of our sun is remarkably stable over time, change in the earth's temperature occurs whenever we — or Nature — change the character of our atmosphere and upset the balance between the short wavelength radiation coming in and the long wavelength radiation attempting to escape.

It was the water vapor in the early planetary atmosphere that blocked a particular range of infrared wavelengths and, in so doing, caused the temperature at the surface of the earth to rise to the present average value of 15°C or 59°F with which we are all familiar. Were it not for the greenhouse effect, in fact, the oceans would have frozen solid, would have remained solid throughout the year and the planet would have remained lifeless. On the other hand, if the greenhouse effects runs away — as it has done on Venus where the atmosphere is much more opaque to infrared radiation — the surface temperature, at balance, is 400°C or 750°F so that, for example, lead on the surface of that planet is normally molten.

There are a broad range of infrared wavelengths and, in achieving the early planetary balance, water vapor blocked out only a small subset of these wavelengths. Because there is enough water vapor in the atmosphere to remove essentially all the energy at wavelengths to which water vapor is opaque, change in the amount of the water vapor over any normal range no longer changes the earth's temperature. We have removed all the energy in this particular band of wavelengths so adding more water cannot remove more; and we would have to remove an enormous amount of water, however, far beyond the capability of any forseeable natural process before we reached the state where energy in this band again began to escape.

The case of carbon dioxide is different in that we have not yet saturated our atmosphere despite the enormous amount of this gas that we have delivered to it.

III. THE HISTORICAL RECORD

By drilling deep holes into the Greenland and Antarctic icecaps — icecaps that are several miles in depth — we can, in a sense, go backward in time and, from the tiny bubbles trapped in this primordial ice, we can examine samples of the Earth's atmosphere dating back in time for hundreds of thousands of years. What we find from such measurements is that the amount of carbon dioxide in the primordial atmosphere remained essentially constant at 275 parts per million (ppm) over hundreds of thousands of years until about 1850. Since 1850, the amount has increased almost linearly with time and now amounts to about 346 ppm; superimposed on this steady climb is an annual oscillation. The amount of carbon dioxide in the atmosphere drops by a few percent during the summer and autumn and increases during the winter and spring. This is almost certainly a reflection of the fact that plants and forests absorb more carbon dioxide during their growing season than is emitted from other sources but return much of this to the atmosphere during the winter and spring.

IV. SOURCES OF CARBON DIOXIDE

Where does this incremental carbon dioxide, appearing since 1850, come from? More than 50% comes from the burning of fossil fuels. In this country from 1850 to about 1900 wood was the dominant fuel. From 1900 to 1950 wood was replaced by coal and from 1950 until the present, coal has been replaced by oil and natural gas. All of these release energy through the oxidation of carbon to produce carbon dioxide. The cleanest of these fossil fuels, both in an environmental sense generally and in terms of the amount of carbon dioxide liberated per unit of energy, is natural gas with coal being by far the worst in both respects.

A second major source of carbon dioxide occurs in the manufacture of Portland cement where limestone — calcium carbonate — is heated to yield lime — calcium oxide — and release carbon dioxide. A third major source of carbon dioxide occurs in the destruction of forests and, in particular, tropical forests.

Forest destruction contributes to carbon dioxide in two ways. First of all, in killing the living trees it makes them unavailable to absorb carbon dioxide and incorporate it into their biomass structure; secondly, cutting of the tropical forests exposes the formerly protected humus on the forest floor to biological decomposition, again yielding carbon dioxide. Cutting also adds to the humus layer the nonmarketable debris left after the forest harvesting.

It is a sobering and scandalous fact that at our present rate of destruction of tropical forests all significant such forests will be gone in 15 years. The largest remaining, by a large margin, are in the Amazon basin in Brazil with lesser ones in equatorial Africa; it bears emphasis that in addition to the effects just noted the destruction of these tropical forests vastly reduces the biological diversity, the gene pool, remaining on the planet. This gene pool is one of our greatest treasures — a treasure that we have only begun to appreciate from which we can, over time, discover new kinds of plants, new antibiotics, new characteristics in biological systems that can have the most profound consequences on our future as a race. Here too we have only begun to appreciate the rate at which we are irretrievably destroying a fantastic heritage.

These are the major sources of carbon dioxide but it bears noting that, in addition to the forest takeup of this particular molecule, the earth's oceans have absorbed just about the same amount of carbon dioxide as is currently in the earth's atmosphere, something approaching 650 billion tons of carbon equivalent, and have done so almost entirely through the living creatures in the ocean. Until very recently it was assumed that the upper hundred meters or so of the ocean was involved in rapid turnover with the surface and that this layer contained most of the living creatures in the ocean so that it also contained most of the trapped carbon dioxide. Detailed studies in recent years have shown, however, that this is not entirely true and that slow turnover and exchange between the abyssal waters and those at the surface continue the absorption of carbon dioxide and thus prevent that in the atmosphere from rising as rapidly as it otherwise would.

Carbon dioxide now in the earth's atmosphere is approaching a level where it will absorb all the energy in the wavelength bands to which it is sensitive and will thus saturate so that further CO_2 will have no further effect on the earth's temperature.

V. OTHER GREENHOUSE GASES

Unfortunately, however, we can draw very little comfort from this fact because there are other greenhouse gases which are still in very low concentration in the atmosphere and which are sensitive to large wavelengths bands. With increasing concentration these other gases can have major impact on the temperature balance. First among them is methane, CH_4, a very powerful greenhouse gas whose major source is decaying vegetation and humus, rice paddies, and the breath of ruminant animals. Again with destruction of tropical forests and the increased decay rate of the waste vegetation, with massive increase in the area under rice cultivation, and with major increase in the earth's bovine population, methane in the atmosphere is increasing rapidly.

Although ozone is normally discussed only in terms of its behavior as a shield in the upper atmosphere against solar ultraviolet radiation, it too is a very powerful greenhouse gas produced at lower altitudes primarily as a result of photochemistry, induced by solar radiation, in smog clouds resulting from automotive exhaust.

It is a somewhat sobering fact that the New Haven region has the worst ozone contamination situation anywhere. Whereas prior to 1850, ozone in this part of the world was normally at about the 10 parts per billion (ppb) level, during the summer of 1988, it frequently reached 200 ppb in New Haven. Worse than that there is nothing whatsoever that could be done by Connecticut as a State, or New Haven as a city, to change this situation in any significant way. These 200 ppb of ozone that we measure typically between 11 a.m. and 1 p.m. result from solar radiation-induced photochemistry in the cloud of smog produced by the morning automobile traffic into New York City as this cloud drifts in the prevailing wind pattern up the Connecticut coast reaching New Haven about noon. It bears emphasis that in addition to ozone, this smog photochemistry also produces some extraordinarily dangerous carcinogens and other harmful chemicals. The ozone itself, in addition to its greenhouse potential, is enormously destructive of rubber products, specifically automobile tires, and of the tissues in the human lung. These are effects of ozone in the lower atmosphere as opposed to those more frequently discussed in the upper atmosphere.

VI. GREENHOUSE EFFECT TEMPERATURE CHANGES

I have mentioned above that it is the greenhouse effect that is responsible for holding the temperature of our planet at some 15°C. How big a change in this average planetary temperature is required to have significant other effects? Fortunately we have excellent information on this because studies on the polar ice caps have shown conclusively that at the depth of the most recent ice age, about 18,000 years ago, the average planetary temperature was 5°C -- that is -- the average had decreased by only 10°C or 18°F. From these same ice cores we can determine with high precision that in the so-called Little Ice Age in the 17th century -- a time wherein both the northern United States and Europe had snow throughout the summer -- corresponded to an average temperature drop of only 1.5°C -- 2.7°F -- from the current value. The point here is that even a very few degrees change in the average temperature can have completely dramatic consequences. The system is an extraordinarily sensitive one.

VII. WORLD CLIMATE MODELS

What is new in the past few years is our ability to understand this sensitivity in vastly greater detail than was the case previously. In large measure this has resulted from the availability of supercomputers that are able to cope with the enormous data flow required to characterize the state and behavior of the earth's atmosphere. Currently there are three major world centers having such capabilities. One is at Princeton, New Jersey, under the direction of Joseph Smagorinsky operated by the National Oceanographic and Atmospheric Administration; one is at Cambridge University in England, under the direction of Professor Brian Mason, and one is in Novosibirsk, the science city in Soviet Siberia, where, until very recently, the Center was under the direction of Professor Yuri Marchuk who has just recently been appointed to the Presidency of the Soviet Academy of Sciences. Only within the past year or two has it been possible to compare the computer results obtained using quite different models developed independently in these three centers to obtain some feeling for the model reliability and the degree to which their predictions agree. Fortunately, the agreement is remarkably good suggesting that the underlying science is reasonably in hand.

Unfortunately, however, our measurements, our data base, and our predictions are all excessively crude. Currently, for example, we make predictions at 10 levels in the atmosphere on a grid that is 300 miles on the side. Under United Nations auspices, we are currently moving to a finer grid where we will be able to make predictions at 18 levels in the atmosphere and on a grid 150 miles to the side. This change to a less crude grid represents a factor of 16 in the cost of data collection and analysis. On the horizon, but still far out of reach both economically and technically, is the desire to make predictions at 20 levels in the atmosphere and on a grid 60 miles to the side. This would require an increase by a factor of 500 in the collection and analysis cost and it is quite clear that even here we would still be far beyond the region where one could hope for predictions about local weather. It is well to keep in mind the distinction between climate and weather, between macroscopic and microscopic predictions.

What have we learned in these massive atmospheric studies, beyond the fact that our models appear to be soundly based? Striking, perhaps, is the fact that the planetary warming, because of the greenhouse effect, would be highly nonuniform. For every degree temperature rise at the equator, there would be roughly six degree rises at the Poles. Since this is where the major ice caps store enormous volumes of water in the polar ice, these are the regions where a six degree temperature change could have dramatic consequences. Although we cannot predict in detail what the consequences will be, it is already generally agreed that they fall in four classes, namely, changes in

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

XI. MAJOR CLIMATE CHANGES

I have mentioned that precipitation patterns could revitalize the Australian desert. Even farther beyond our range of prediction, is what might happen to the Sahara. Our models are sufficiently good now, however, that we can run computer experiments asking, **what if**, in many regions of the globe. One of the interesting consequences of such experiments is the discovery that if it were possible to put enough water on the Sahara Desert to moisten the surface to a depth of only 4 inches, the climate pattern would flip and the Sahara region would become a tropical rain forest in a new stable climate configuration which, incidentally we know to have occurred in the past from our radar observations from satellites, all of which show massive fossil river beds and water courses throughout the entire Sahara. It is quite clear also that the pattern of the monsoons in India and Southeast Asia would change completely with even a small change in average world temperature. Since literally millions depend for their existence on the reproducibility of these monsoons to produce the rice crops, change here could be catastrophic. The fact that 1987s monsoon was unusually weak has led to the death of more than 10 million people in India and Bangladesh and serves as an indicator of possible futures. The 1987 massive drought in the Brazilian Northeast — because of the low population density in that region — had no such striking consequences but it, too, is indicative of the sensitivity of our atmospheric system and our world climate patterns to even small changes.

XII. GREENHOUSE TIME SCALES

What has perhaps surprised atmospheric scientists more than anything else in recent years, is the discovery that massive changes can occur in periods of only a few years. That is instantaneously on a geological time scale. The most striking example of such a rapid change is the development of the so-called ozone hole over Antarctica. It has been found that 90% of all the ozone between 15 and 20 km above the Antarctic ice cap has disappeared in the past 9 years for a 50% decrease overall in the Southern polar region. Because this is such a striking phenomenon, it has attracted the world's atmospheric scientists and amazingly rapid progress has been made in understanding the phenomena involved. It is now known, for example, that this depletion of the polar ozone is caused by a single molecular catalyst, chlorine oxide (ClO). It is also known that the chlorine in this molecule comes almost entirely from man-made chlorofluorocarbons (CFC's). The reason that these catalytic molecules operate so effectively over Antarctica and not elsewhere on the planet, at least at their present concentrations, reflects the fact that Antarctica is an isolated continent surrounded by the frigid Antarctic Ocean and the South Polar Current. During the Antarctic winter, the temperature drops low enough to form clouds of icy microcrystals on whose surfaces the catalytic destruction of the ozone proceeds very rapidly and the presence of the frigid polar current keeps the atmospheric temperature low enough to maintain these aerosols long enough to destroy a substantial fraction of the ozone. The same effect has not been at northern latitudes because there is no similar free-flowing water surface around the polar ice cap to keep the atmospheric temperature down; ominously, however, only in the past few months scientists have begun to report local ozone depletion in the Arctic!

It is clear, that if we continue to produce chlorofluorocarbons this effect will continue to spread as the concentration of chlorine oxide in the atmosphere increases.

XIII. ATMOSPHERIC CHLORINE

This question of the release of chlorine into the earth's atmosphere has been recognized internationally as an emergency situation and, in September 1987, 24 countries signed the so-called Montreal protocol which calls for cutting CFC use in half by 1998. Only six months later, the findings of NASA's Ozone Trends Panel suggest that the protocol's limitations probably will not be sufficient to save the ozone layer and that even more stringent reductions in CFC's will be required.

The CFC's were introduced in 1930 and have four basic uses — refrigerants, blowing agents for making foam, cleaning fluids, and propellants. As refrigerants, they are used in most freezers and refrigerators as well as in air conditioning units in automobiles and buildings. As blowing agents, they are used in making both rigid foam, which appears in such items as foam ice chests and fast food hamburger boxes and flexible foam appearing in furniture cushions and foam pillows. As cleaning agents, they wash hundreds of products from computer chips to artificial hip joints. As propellants, they are used in aerosol sprays in much of the world, although their use has been banned in the United States. They also appear in fire extinguishers, in urethane shoe soles, and in applications too numerous to list. Currently, the world chlorofluorocarbon industry is a $2.5 billion one and we in the US produce roughly 500,000 tons of these products each year. DuPont alone produces over $600 million worth of CFC's per year but DuPont has taken the leadership in announcing that it will phase out CFC production entirely — replacing the CFC's with new molecules that have been developed with additional hydrogens in their structure so that they are susceptible to break-up in the lower atmosphere. Much of the problem with CFC's simply reflects the same property that makes them so desirable in the above listed applications; they are extraordinarily stable and because of that make their way unscathed into the upper atmosphere where they are finally broken up by energetic ultraviolet from the sun and their chlorine atoms are left free to do their catalytic work.

XIV. FEEDBACK MECHANISMS

Obviously there are very complicated interactions here. If there is less ozone, then less infrared will be stopped by the ozone layer and the greenhouse effect resulting from of the ozone will be decreased while ultraviolet transmission to the earth's surface will increase. There are other feedback mechanisms. If the mean temperature increases, then the Arctic permafrost melts and releases large amounts of both carbon dioxide and methane which in turn increase the temperature rise so that we have a positive feedback loop. Again, if the earth's temperature increases, the polar sea temperatures increase and complex molecules in the Arctic and Antarctic Ocean called **calthrates** that are stable only at very low temperature decompose liberating huge amounts of methane further increasing the temperature rise.

A feedback loop that is not at all well understood is associated with the fact that automotive transport produces not only carbon dioxide but also oxides of nitrogen. The higher the combustion temperature the more abundant the nitrogen oxides compared to carbon dioxide. On the one hand, these nitrogen oxides can act as fertilizers and promote much more rapid growth of the planet's forests so that carbon dioxide is taken out of the atmosphere and bound into biomass. On the other hand they can increase the low atmosphere ozone levels — the photochemistry in smog problem discussed above — which results in the destruction of forests and the release of carbon dioxide so that we have the potential of both negative and positive feedback driven by the nitrogen oxides. This is only a crude example of the kind of complexity that atmospheric chemists and physicists are attempting to resolve in order to improve their models, recognizing that each time one of these improvements is added to a climate model, the amount of computation required goes up by orders of magnitude and new generations of supercomputers become essential.

XV. COURSES OF ACTION

What then can we, as a civilization, do about the greenhouse effect. First of all it must be emphasized that **nothing** that we do will have an immediate effect. We have already loaded an enormous mass of greenhouse gas into the earth's atmosphere and we have no way of removing it. At best, we can stop making the situation worse.

Perhaps most direct and immediate, we can ban production of chlorofluorocarbons and attempt to convince other nations to follow suit. We can take steps to reduce the amount of carbon dioxide that we are adding to the atmosphere through the burning of fossil fuels. It bears emphasis that the Chinese have long considered that the burning of such fuels verges on the criminal because these exquisite organic molecules that we burn for their thermal energy are the feedstuff for pharmaceutical, plastic, and a great many other industries and our descendants will find it necessary to recreate such molecules at vast expenditure of resources and energy because we will have depleted most of those that nature has produced over the roughly 5 billion year life of our planet. It is a sobering thought that although we in the United States have less than 6% of the world's population, we are responsible for more than 33% of the total world's energy consumption. It is also sobering to realize, that the developed world, in something a little over 60 years, has used well over 50% of the readily available oil and natural gas.

But how do we stop burning fossil fuels? Obviously we are not prepared for a massive reduction in our standard of living nor are we prepared to switch from electricity to much less convenient sources of energy. It appears to me that we have little choice but to move forward with the exploitation of nuclear energy, an energy source that provides no atmospheric load whatsoever.

We have had nuclear fission energy available to us with uranium and thorium fuels for some 40 years but, particularly in this country, we have not used it wisely. In France and in Japan, the announced national goals are to have more than 90% of electrical energy — and a significant fraction of space heating as well — produced from nuclear sources by the mid 1990s whereas in the US the fraction of our energy coming from nuclear fussion sources has remained essential constant at about 12% since the early 1960s. This, in part, reflects the fact that in Japan, for example, it is possible to go from the decision to build a nuclear reactor to the point where it is producing economic electricity in 4.5 years. Whereas in the United States, 14.5 years is more typical. The ten year difference, coupled with the cost of financing these nuclear power plants, clearly makes us economically noncompetitive with the Japanese.

More important, however, we have not, in this country, succeeded in convincing our public that nuclear energy is indeed safe. In part, this has reflected a somewhat cavalier view that nuclear reactors were not all that different from coal or oil fired burners in that they produce steam which drives turbines which generated electricity in the usual way and, therefore, the standards of training and of operation in the civilian power industry are not, for example, anywhere near those which Admiral Rickover insisted upon in the nuclear Navy. The architectual and engineering firms who designed the nation's civilian reactors also made the very profitable — for them — mistake of reinventing the wheel at each reactor site. Obviously this was done with the intent of deriving additional profit but also it happened because both they and their utility customers wished to include each engineering improvement as it appeared. This unfortunately resulted in reactors that were all different; each one had to be put through an extraordinarily long and detailed safety certification program, stretching out the construction time and increasing the cost.

I am convinced that in order for the United States to return to nuclear energy in a substantial way it will be necessary for the industry and the utilities to develop new reactors that are intrinsically safe — that is, that if their electrical power or their cooling water, or anything else, is interupted they simply close themselves down — without damage — and remain until someone chooses to correct the situation. Such reactors have been clearly demonstrated to be feasible. What is required is some several hundred million dollars of up-front engineering costs to make them commercially feasible. Secretary Herrington of the Department of Energy has just announced that in developing a new weapons material (tritium and plutonium) production reactor system for the nation he plans to develop just such a reactor — a 350 megawatt, modular high-temperature, gas-cooled unit which can be made in multiple copies, certified as safe once and for all so that a utility simply adds more of these units as it needs more capacity, gaining at the same time the flexibility of being able to turn off one of more of these modular units for refueling, repair, modification, or what have you. Unfortunately, such a development is perhaps five years and more probably ten years away in this country.

There has been much discussion of the possibility of eliminating fission energy — because of perceived waste disposal problems — and going directly to fussion, reproducing here on the earth's surface the energy source of our Sun. Unfortunately, although we have now demonstrated that the release of fussion energy is feasible on a laboratory scale, the engineering problems, which include compressing the heavy hydrogen fuel to some 20 million pounds per square inch and simultaneously heating it to close to 100 million degrees are so demanding that it is most unlikely that we will have economic fussion energy before 2025.

It is essential, however, that we make the decision to move in this direction of increased dependence on nuclear energy as soon as possible. It is essential that we recognize that the current trend to switch from oil and natural gas to coal in our electrical generating stations is in the wrong direction in terms of the greenhouse effect and it is essential for us to realize that we who use a disproportionate share of the planet's energy must take the lead in reducing the utilization of fossil fuels.

We must recognize, for example, that it is unreasonable for the United States to turn to the Third World and demand that it eschew the use of convenient fossil fuels in its development after we have used such a prodigal share in ours. We have the ability to go directly to a nuclear technology whereas the Third World simply does not and it is essential that the United States join with France and Japan and the other developed countries in moving away from the era of fossil fuels.

It is important also for us to work together with countries like Brazil to develop alternatives to the destruction of tropical forests not only because of greenhouse considerations but also as noted above because they are irreplacable gene pools.

And it is also essential that we continue to develop better automotive engines with cleaner exhaust, because in their absence, major urban centers are well on their way to becoming unlivable. Mexico City is an excellent example at the present time; Los Angeles and New York are rapidly becoming ones. One of the new technologies in this area that demands careful study is that evolved in Brazil where all new automobiles are required to burn alcohol rather than petroleum-based fuels with considerable reduction in the exhaust problem. The transition between these fuels is much less simple than is generally anticipated in that it requires major changes in most engine components to avoid the very rapid destruction that occurs when alcohol is burned in an engine designed for gasoline.

XVI. CONCLUSIONS

Like a great many other problems in a democracy, the greenhouse effect and its potential consequences will not be addressed unless informed citizens make it clear to their representatives in Washington and in state capitals that they are concerned about the issue and that they expect action. It is the responsibility of citizens to inform themselves about such problems and then to communicate their concerns directly to their representatives. Even a few thoughtful, individual letters on a particular topic appears as a ground swell of public concern to a hard-pressed legislator and just as we have the responsibility for taking leadership in this country we also have at hand the mechanisms for doing so.

As I have indicated above, the greenhouse effect is nothing new and indeed life on earth depends upon it but our modifications of our atmosphere, and the consequence change in the greenhouse effect that these modifications produce, does represent the largest unplanned experiment that our race has yet undertaken. Unless we devote our best efforts to understanding what the greenhouse effect can do to world climate and through it to the areas that I have discussed in this paper, the consequences for our descendants may well be catastrophic. We have no time to waste!

NOMINATIONS—JULY

TUESDAY, JULY 25, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met at 2:06 p.m. in room SR-253 of the Russell Senate Office Building, Hon. J. James Exon presiding.

Staff members assigned to this hearing: Sheryl Webber Washington, professional staff member; Robert Holleyman, staff counsel; and Ruth Johnson, minority professional staff member.

OPENING STATEMENT BY SENATOR EXON

Senator EXON. The Committee will please come to order. Today the Committee on Commerce, Science, and Transportation will hear testimony from Gilbert E. Carmichael, who has been nominated to serve as the Administrator for the Federal Railroad Administration.

I would like to welcome Mr. Carmichael, who has not only distinguished himself in the business community as an automobile dealer and real estate developer, but who has also committed himself in service to the State of Mississippi and the Nation by serving on Mississippi's Advisory Committee on Civil Rights, the National Transportation Policy Study Commission and the National Highway Traffic Safety Advisory Committee.

The position of the Administrator of the Federal Railroad Administration could be called the caretaker of the railroad industry. The duties include administering Federal safety rules and regulations, providing program management and carrying out rail policies and administering Federal programs designed to assist in the development of national, regional and local rail services.

If confirmed as Administrator of the Federal Railroad Administration, these would be only some of Mr. Carmichael's duties. This is a challenging and important position concerning an industry which is vital to our Nation's economy.

I look forward to hearing testimony from Mr. Carmichael regarding his qualifications for this appointment, as well as his plans for the Federal Railroad Administration as a whole. Mr. Carmichael will be introduced this afternoon by the two distinguished senators from his own State of Mississippi, my colleague on this Committee, Senator Trent Lott, and Senator Thad Cochran as well as, I understand, by Congressman Sonny Montgomery whom we expect shortly and we will be very pleased to recognize him when he comes.

With that, I just want to welcome you once again, and I especially want to welcome the two distinguished senators with you, Mr.

Carmichael and in the usual procedure we will recognize the distinguished senior senator first, Senator Cochran.

STATEMENT OF HON. THAD COCHRAN, U.S. SENATOR FROM MISSISSIPPI

Senator COCHRAN. Thank you very much, Mr. Chairman. It is really a great honor for me to be here with Gil Carmichael today and my colleague Trent Lott to present Mr. Carmichael to you as the nominee of the Federal Railroad Administrator. It is an honor and also a pleasure.

I do not know of anyone in our state who has been more personally involved in a constructive way in helping to identify and solve problems in Mississippi, or to bring his abilities to bear on issues that confront our state in politics, in government, in civic affairs.

He is truly one of our finest citizens in every sense of the word. He has been a very successful businessman, but he has also given a lot of his time and energy and effort to the public good, trying to make a contribution to improve our state's quality of life, our transportation system and our government.

He is uniquely qualified, in my judgment, to serve as the Federal Railroad Administrator. He has had experience as a member of various railroad commissions and task forces. He has also served on national bodies whose responsibility it was to develop new programs for highway transportation and highway safety, so he brings a wide range of experience to this job.

I think President Bush has selected well, when he selected Gil Carmichael for this important position. I know he is going to reflect credit on our state in his service in this capacity in Washington, and will do a great deal of good for our Nation in the transportation area. So I am looking forward to working with him in this new capacity, I know the Committee will find him to be a very hard-working, conscientious and dependable public servant.

Senator EXON. Senator Cochran, thank you very much for that fine statement. We are very delighted to have you come before the Committee today. Senator Lott?

OPENING STATEMENT BY SENATOR LOTT

Senator LOTT. Thank you, Mr. Chairman. I do want to thank you, Mr. Chairman, for being here this afternoon and giving us the opportunity to move this very important nomination that has been made by the President of the United States. We are very hopeful that his nomination will be approved by the Committee and moved very expeditiously through the full Senate.

It is a great honor for me to be here this afternoon also, joining our senior Senator from Mississippi, Thad Cochran, in introducing and welcoming to this Committee that I have the pleasure of serving on, Gil Carmichael, of Meridian, Mississippi, to be the Federal Railroad Administrator.

As Senator Cochran has pointed out, Gil Carmichael has a long history in Mississippi of being a successful businessman, a community leader in Meridian, Mississippi, a civic leader and involved in government both at the local and state level.

In many, many ways, we are extremely proud that President Bush would recognize Gil Carmichael and through him our state for this very important position. Gil Carmichael has the integrity, the drive and the innovation that I think will be very helpful in this position and that the people he has to deal with will appreciate very much.

I have seen many instances where he is not satisfied to just deal with the status quo. He is looking for ways to improve the quality of life of our people in our state and now he will be in this very important national role.

Mr. Chairman, you, coming from a small state, population-wise, in Nebraska, certainly understand how we as Mississippians are extremely proud of this man, to be from my small State of Mississippi and to serve in this very important position.

But he is qualified not only by background—he has got an outstanding education and he has been in journalism, he has been in business, in sales—but he is also uniquely interested in transportation and the railroad industry. As a matter of fact, he was appointed as Commissioner of the National Transportation Policy Study Committee, which was created by Congress and the White House in 1976 to determine the transportation needs of the Nation for the year 2000.

That was a unique opportunity for him to look at our overall transportation needs. He served as Chairman of the Department of Transportation National Highway Safety Advisory Committee, as one of the Officers of the Program for the Mississippi Motor Vehicle Commission Act, which was adopted subsequently by 19 other states, and he founded and directed the Ad Hoc Committee for the 1987 Mississippi Statewide Highway Program.

It took a lot of time on his part and other civic leaders that volunteered to work on this particular program. He was one of the first proponents in our state for a comprehensive four-lane program for our highway system which is now underway. He was one of the original advocates of the creation of the original Gulf and Mississippi Railroad, and he served as a member of the Gulf and Mississippi Railroad Advisory Committee.

Since 1985, he has been serving as chairman of an ad hoc railroad passenger project for his home town of Meridian, Mississippi, which has a long history of association with the railroad industry. He is a proven leader in our State of Mississippi in transportation, and he has been a respected leader and a successful participant in national transportation policy. So it is a great honor for me to join here in commending to my colleagues on this Committee and the entire Senate Gil Carmichael because of his dedication, loyalty, education and experience with transportation policy.

Mr. Chairman, thank you for giving me this opportunity and I certainly heartily endorse this nomination.

Senator Exon. Senator Lott, thank you very much. I invite either or both of you to stay for the rest of the hearing, if you can. I assume that Senator Cochran has to leave. I hope you, Senator Lott, will be with us as a member of the panel.

Mr. Carmichael, I am going to turn it over to you now for any statements you might have. I would say in advance that I appreciated very much the fact that you came in. We had a nice visit within the last week. I told you at that time that we would expedite this procedure as fast as we could.

I had no idea, frankly, at that time that we could expedite it this fast, but that just shows that we can get things done around here sometimes when we want to and in your case we certainly wanted to, and I look now with interest to your statement. Please proceed.

I have a statement that Senator Hollings would like to have included in the record, along with your biographical sketch and prehearing questions.

[The statement, biographical sketch, and questions and answers follow:]

OPENING STATEMENT BY THE CHAIRMAN

It is a pleasure to have before us the nomination of Gilbert E. Carmichael.

If Mr. Carmichael is confirmed as the new administrator of the Federal Railroad Administration he will be confronted with several important challenges in an effort to ensure safe and efficient rail service.

Mr. Carmichael's background both in the private sector, as a businessman intimately involved with the transportation industry and during his years of public service in Mississippi and with the National Transportation Policy Study Commission make him well suited to face the challenges that lie ahead.

I look forward to Mr. Carmichael's testimony and I anxiously await his comments on the 1988 Rail Safety Act.

The 1988 Rail Safety Act represented a strong bi-partisan effort in both the House and the Senate culminating in the most substantial effort in two decades to strengthen rail safety. I am interested in knowing whether or not as Administrator, he will vigorously enforce the provisions that allow the FRA to take actions against those individuals and carriers that violate safety regulations.

I am also particularly interested in Mr. Carmichael's views on random drug and alcohol testing as a means to deter individuals in safety sensitive positions in the rail industry from abusing drugs and alcohol.

I look forward to hearing more about the priorities Mr. Carmichael would set for FRA during the coming years.

ERNEST F. HOLLINGS, SOUTH CAROLINA, CHAIRMAN

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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Carmichael (Last) Gilbert (First) Ellzey (Other)

Address: 2009 - 39th Street (Current residence) Real Estate Developer/Auto Dealer (Business)
Meridian, Mississippi

2. Position to which nominated: Federal Railroad Administrator   Date of nomination: July 11, 1989

3. Date of birth: June (month) 27 (day) 1927 (year)   Place of birth: Columbia, Mississippi

4. Marital status: Married since August 1954   Full name of Spouse: Carolyn Dean White Carmichael

5. Names and ages of children: Gilbert Scott Carmichael   Age: 25

6. Education:

	Institution	Dates attended	Degrees received	Dates of degrees
College	Texas A&M	9/44 - 5/45	BS	6/1950
		6/47 - 1/50		

Two years of engineering then transferred to Business School majoring in Business Administration

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of employer	Address	Type of work
Jan. 1950	Mar. 1958	The Wall Street Journal	N.Y., N.Y.	Sales/Circulation
Mar. 1958	Jan. 1960	Roundtree Enterprises	Shreveport, LA	Automobile Distributor
Jan. 1960	Sept. 1961	International Auto Sales, Inc.	New Orleans, LA	Automobile Distributor
Sept. 1961	Mar. 1989	Self-Employed	Meridian, MS	Automobile Dealerships Real Estate Development

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

o Member of the Mississippi Advisory Committee on Civil Rights for many years.

o Commissioner, National Transportation Policy Study Commission, Chairman of only Subcommittee-Advanced Technology, 1976-79.

o National Highway Traffic Safety Advisory Committee, 1972-76 (Chairman 1975-76).

o Mississippi Advisory Committee to White House on Public Education during desegregation.

o Governor's Emergency Council, 1967 (Hurricane Camille-MS)(White House Appointee)

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

Member, Lauderdale County (MS) Republican Executive Committee

Member, Bush Campaign National Steering Committee

Vice Chairman, Mississippi Committee for George Bush (contributed $1,000 to Victory '88)

Vice Chairman, Jack Reed for Governor Committee (Honorary)

Republican nominee U.S. Senate 1972; nominee for Governor 1975, 1979; New State Constitution candidate for Lt. Gov. 1983; personal contributions to my campaign have been considerable. I have made numerous contributions to other candidates over the years usually in the amount of $100-$500. Helped to pioneer the two party system in the south.

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Tombigbee-Warrior Research Quadrangle, Founder, Organizer (resigned)

Trustee, Taft Institute, New York (resigned)

Review Council, Public Agenda Foundation, New York (resigned)

Visiting Member, Harvard-MIT Joint Center for Urban Studies, Cambridge, MA (expired)

Planning Commission, City of Meridian, MS (resigned)

Chairman, Meridian, MS Industrial Foundation (resigned)

Ad Hoc Committee for 1987 Mississippi Statewide Highway Program (AHEAD), Director (resigned)

Chairman, St. Joseph's Community Hospital (resigned)

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Fellowship - Institute of Politics, Kennedy School of Government, Harvard Univ., (1976)

Silver Life Saving Medal, U.S. Coast Guard (1953)

Mississippi Man of the Year Award (1972)

Time Magazine (State) Quality Dealer Award (1970)

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

"The Ethical Car" Department of Transportation International Congress on Automotive Safety--paper presented at San Francisco, 1974

"The Ethical Car Evolved" paper given at International Congress on Automotive Safety, Cambridge, MA 1975

National Transportation Policy Study Commission Report, Chapter 6 (Advanced Technology), 1979

"Additional Views of Commissioners," National Transportation Policy Study Commission Report (with Rep. Glenn Anderson), 1979

PREHEARING QUESTIONS OF THE COMMITTEE AND THE ANSWERS THERETO

GENERAL QUALIFICATIONS

QUESTION: Please outline for the Committee those experiences you have had that make you qualified to serve as Federal Railroad Administrator.

ANSWER: My entire adult life has centered on transportation. From 1973 to 1979 I served as an advisor on highway safety for the U.S. Department of Transportation. As a Presidential appointee to the National Transportation Policy Commission (1976-1979), I helped develop national transportation policies and requirements for the year 2000. My involvement also included the chairmanship of the Subcommittee on Advanced Technology. Activities in my home state of Mississippi have included advocacy for the creation of a state transportation department, the preservation of freight rail systems, advocacy of expanded rail passenger service, restoration of a 700-mile rail system, and authorship of a $1.6 billion four-lane highway development program. From 1981-1987, I helped create the Gulf & Mississippi Railroad and served on its advisory board from its beginning, to its near failure, and to its merging with the Mid-South Railroad Company. As a consultant to the Federal Railroad Administration during the past four months, I have had the opportunity to familiarize myself with many of the concerns and challenges of this exciting agency.

GOALS

QUESTION:	If confirmed, what do you hope to accomplish as Federal Railroad Administrator?
ANSWER:	My priority will be to assure that the Federal Railroad Administration is a thorough and efficient enforcer of safety standards for America's railroads. In addition, I want to strengthen the growing system of short-line and regional railroads, because I consider them to be of vital importance to the future of rail service, especially in rural America. In connection with Secretary Skinner's National Transportation Policy project, I will work to assure a balanced transportation system, one that provides a key role for the nation's underutilized freight and passenger rail potential. During a period of increased sensitivity to environmental and energy concerns, railroads represent an important component of a national strategy to deal with energy and environmental problems. The Federal Railroad Administration also should be prepared to assume a leadership role in connection with the potential development of high-speed and maglev systems. I am supportive of the progress made by Amtrak toward providing quality service at lower cost to the taxpayer. I believe that a carefully-constructed and orderly process to move Amtrak to self-sufficiency is a reasonable national goal. I intend to help Amtrak management carry out this process.

RAIL SAFETY

QUESTION: What is your view regarding the FRA's progress in implementing the Rail Safety Improvement Act of 1988? What challenges remain, and do you anticipate meeting the statutory deadlines established by the Act?

ANSWER: FRA has made excellent progress in implementing the Rail Safety Improvement Act (RSIA) during the past year. Each item has either been addressed through the issuance of a final rule or is well along in the process of careful agency action. Unfortunately, both the number of rulemaking actions spawned by the RSIA and their complexity have made meeting all the statutory deadlines impossible. This is most notable in FRA's work on the locomotive operator qualifications issue addressed by section 4 of the Act. Since enactment, FRA has done extensive and exhaustive field work on this issue requiring a significant investment of agency resources. The issues raised by this matter are particularly complex and break new ground in the rail industry. At this time, FRA's nearly 300-page NPRM is undergoing review within the Department, and we expect to issue that proposed rule in the near future.

- FRA has issued final rules (1) requiring pre-trip certification of automatic train control, train stop, and cab signal tests; (2) requiring automatic train control on the NEC and the Atlantic City line; (3) extending the civil penalty provisions of its safety regulations to individuals, increasing the maximum penalty from $2,500 to $10,000 (or, in some cases, $20,000), and revising its penalty schedules for violations of particular regulations; and (4) prohibiting willful tampering with safety devices.

- FRA has completed regulatory proceedings and final rules are under review (1) revising regulations implementing the older safety laws to reflect FRA jurisdiction over "railroads"; (2) establishing procedures for disqualification proceedings for determining the fitness of individuals who have violated FRA safety rules to perform safety-sensitive functions; and (3) establishing protection procedures for on-track vehicles in which rest is provided for maintenance-of-way (MOW) workers.

- FRA has completed the regulatory proceeding and is drafting a final rule regarding submission of employee statements on accident causation.

- FRA has issued an ANPRM regarding tamper-resistant event recorders on trains.

- FRA has drafted NPRMs that are under review regarding (1) maintenance of train-activated signal systems and devices at highway grade crossings; (2) safety of MOW workers on railroad bridges; and (3) a program for licensing or certification of operators of locomotives through a program of review and approval of each railroad's qualification standards.

RAIL SAFETY

QUESTION: The U.S. General Accounting Office (GAO) issued a report in April of this year that criticized the FRA's oversight of self-reporting of actual accidents, injuries, lost workdays, and estimated damages due to train accidents by the railroads. What steps are being taken to address the deficiencies identified in this report and to respond to GAO's recommendations?

ANSWER: I have a strong interest in the accuracy of the FRA rail safety data base. It provides information important for making judgments about the state of rail safety and thus for managing our resources to promote further improvement in the safety of rail passengers and employees and of communities neighboring railroads. In its exit conference with FRA, I understand that GAO indicated that in most respects railroad reporting appears to be better than that in many other U.S. industries. However, a safety agency must always be suspicious of the data it receives, and we are very pleased to have GAO assist FRA and the rail industry in further reducing its margin of error.

FRA's Office of Safety is carefully reviewing the GAO report and will move rapidly, but deliberately and systematically, to pursue GAO's findings and recommendations, including the need to ensure that the safety and claims departments of the railroads communicate better with one another. I intend to provide a detailed response to that report within 30 days after my confirmation.

DRUGS AND ALCOHOL

QUESTION: FRA led the transportation sector in establishing drug and alcohol testing requirements for safety-sensitive workers. What is the status of FRA's new random testing rules? Do you foresee the need for additional action in this area through rulemakings, legislation, or efforts within the industry?

ANSWER: The random drug testing rule was issued on November 14, 1988. Class I railroads are required to file proposed random testing programs by October 2, 1989 and to begin testing by January 16, 1990. Class II railroads will submit programs by April 2, 1990 and begin testing by July 2, 1990. Class III railroads will submit programs for approval by July 2, 1990 and begin testing by November 1, 1990. This rule is already being challenged in court by the RLEA in the Northern District of California. The suit was filed on December 13, 1988, but the RLEA did not seek preliminary relief. I am advised that summary judgment motions are due August 15 and that oral argument is to be held on October 15.

At least two further rulemaking actions are needed. First, Secretary Skinner has committed to examine the issue of random testing for alcohol through an advanced notice of proposed rulemaking. And, second, we need to resolve comments received on the Transportation Workplace Drug Testing Procedures modeled on the HHS Guidelines for Federal Workplace Drug Testing Programs which the Department issued as an interim final rule at the same time the random drug testing rules were issued. We hope that Congress will pass S. 561, with the modifications Secretary Skinner has requested, directing that random testing be performed in the railroad industry.

With regard to industry efforts, I hope that Operation Redblock or similar programs will spread throughout the industry. Such voluntary efforts to address substance abuse are extremely important, and both labor and management are to be congratulated and encouraged for their efforts.

ECONOMIC ISSUES

QUESTION: What is your general assessment of the financial health of the rail industry? Taken as a whole, do you see any significant distinction between large and small carriers in this regard? What consideration, if any, has been given to the impact of leveraging and leveraged buy-outs in the industry?

ANSWER: The operating condition of the nation's main line railroads has never been better, but the financial health still lags behind other segments of the economy. Improved operating conditions in part are the result of actions by the Congress to reduce regulation of the rail industry.

Within Class I and Class II railroads, there are strong carriers, carriers whose economic performance lags behind the industry average, and a smaller number of carriers best described as fragile. If there is a difference between large carriers and small ones, it probably is reflected in the ability to make long-term capital investment in new track and other facilities. The fragile carriers have insufficient resources in this regard.

I am concerned about the level of debt that has been taken on by several of the larger carriers during the past year. The issue of leveraging and leveraged buyouts of railroads should be examined in light of government policies toward the free market in general. In order to conclude that special legislative or regulatory treatment for railroads should be enacted--beyond that now existing at the Interstate Commerce Commission--one would have to conclude that there are special circumstances involved. At present, there does not appear to be conclusive information that this is warranted.

ECONOMIC ISSUES--STAGGERS ACT

QUESTION: Do you have any views as to the impact of the Staggers Rail Act on the rail industry? What are your views on the Interstate Commerce Commission's implementation of the Staggers Act and criticism that the commission has been slow to respond to the needs of captive and other shippers?

ANSWER: The impact of the Staggers Act has been very positive. Without the benefits brought about by deregulation, I am convinced that there would have been a significant number of failed railroads in the wake of the economic recession of the early 1980s. Without the benefits of deregulation, I do not believe that we would have seen the type of service and marketing innovation that has led to such successes as "rail bridges" using double-stack trains.

In recent months the Interstate Commerce Commission has become more attentive to concerns about its responsiveness to specific issues raised by shippers. I believe that the commission has the authority to consider those issues that have been called to the public's attention by affected shippers.

LOCAL RAIL SERVICE ASSISTANCE

QUESTION: What is your general assessment of the local rail service assistance program and the continued need for federal matching funds to assist states in conducting uniform state rail planning, acquiring rail lines which have received ICC abandonment authority, and rehabilitating light-density rail freight lines?

ANSWER: I believe that the Local Rail Service Assistance program has been a successful federal initiative. It served its purpose well. Times have changed. Twenty states have now created rail assistance programs to deal with the financial needs that affect local situations. Funding through these programs exceeds that contemplated in the LRSA reauthorization. In addition, private capital continues to be available to finance worthy projects.

STATEMENT OF GILBERT E. CARMICHAEL

Mr. **Carmichael.** Mr. Chairman, I am very pleased to be here and I thank you for this opportunity. If I am confirmed, I look forward to working with this Committee in the months and years ahead.

To be nominated by the President of the United States is a signal honor all by itself, and to head up the Federal Railroad Administration, if this Committee confirms me, is an opportunity I have dreamed about and I look forward to, should that happen, because I have a deep feeling about the railroads.

I am touched by Senator Lott's and Senator Cochran's seconding, or recommendation, of me. We started a long time ago together. I have been wanting to be a public servant for a long time. Back in 1972 Senators Lott and Cochran and myself ran a rather historical race down the Mississippi. They became congressmen. Today they are senators and, if I am confirmed, I will finally reach my goal of being a public servant. I deeply appreciate their support and their comments.

Congressman Montgomery is my Congressman, and if I know him well he may appear here in a few minutes. He is a very busy man and I have enjoyed my years with him. There is a lady sitting behind me that has been with me for 35 years. I would like to introduce my wife, Deanie Carmichael—if you do not mind, Deanie.

Senator **Exon.** Welcome, Mrs. Carmichael.

Mr. **Carmichael.** We have one son whose name is Scott and he cannot be with us today because he is in school over in Scotland, getting his master's degree. I talked to him Sunday and he was quite excited—I have a feeling—it is about 7:00 o'clock over there, his time, and he is thinking about me and I appreciate it.

I have been up here for about four months now, working as a consultant, as a designee. I came on board and witnessed the process of government as we changed from one Administration to another. I am deeply touched by it.

Senator **Lott.** Gil, if I could interrupt—Mr. Chairman, our colleague from the House, Congressman Montgomery, just arrived.

Senator **Exon.** Congressman, would you please be seated. I am sure that Mr. Carmichael will not mind the interruption. Do you wish to make your statement, or do you have time out of what I know is a very busy schedule, to allow him to finish his statement and stay a little longer? What is your wish, Congressman?

STATEMENT OF HON. G.V. (SONNY) MONTGOMERY, U.S. REPRESENTATIVE FROM THE STATE OF MISSISSIPPI

Mr. **Montgomery.** Mr. Chairman, I have my statement right here. Mr. Chairman, I am very proud to be here today in support of one of my constituents, Gil Carmichael, to be Administrator of the Federal Railroad Administration.

Gil is from my hometown and I have known him for years. Apart from his obvious qualifications for this job, Gil is a class person; and outstanding individual who has spent much of his life working in civic, political, and public affairs to try and help improve the lives of men and women in our State of Mississippi and throughout the country.

I am sure my colleagues, Senators Cochran and Lott, will speak in more detail about Gil's qualifications, but I do want to point out that he has been involved in national transportation issues for nearly two decades. In 1976, he was named by President Ford to the National Transportation Policy Study Commission, which surveyed transportation needs for the year 2000. He served in that assignment with distinction, chairing the commission's only subcommittee.

He has some definite ideas on how to work with the railroad industry to explore new technology, to enable it to save energy and reduce air pollution, and help ensure that the railroads continue to play an important role in the transportation needs of this country.

Railroads are especially important to the smaller cities throughout the United States, and Gil has knowledge of those problems and needs, having come from a small city where he was very much involved in railroad issues.

Gil has the ability to lead. And over the years, he has also shown that he has the ability to develop a positive plan of attack to solve problems. I am excited about the prospect of having Gil Carmichael put his talents to work for the country as head of the Federal Railroad Administration, and I look forward to working with him on railroad and transportation issues.

I highly recommend Gil and hope your committee will act quickly and favorably on his nomination.

Thank you.

Senator EXON. We appreciate very much your coming over here. Congressman Montgomery and I are old friends from way, way back and we will be going into a contentious meeting very soon, when we get into the defense authorization bill, between the House of Representatives and the United States Senate.

You are always welcome and we are honored that you came over today to give your blessing to Mr. Carmichael.

Mr. MONTGOMERY. Thank you, Mr. Chairman. I have certainly enjoyed working with you and you have our colleague now, also on Armed Services. I am sure you will give him excellent guidance, working on the Armed Services Committee—Trent Lott. I look forward to seeing you in about a month. We are working on the Armed Services bill today.

Senator LOTT. Mr. Chairman, if I could interrupt just a moment?

Senator EXON. Yes, Senator Lott. You are entitled to a rebuttal.

Senator LOTT. Well, it is a great pleasure and honor for us to have the distinguished Congressman from Mississippi, Senator Montgomery, here, also known affectionately as General Montgomery, in Mississippi and across the country. He has been a great friend and he is proving once again the type of guy he is by coming over here to join in recommending Gil Carmichael for this very important position.

I have been waiting 16 years, Mr. Chairman, to get Sonny Montgomery before me while I was on a Committee, so at long last—just one question, Sonny, that I need to know, and it is important. Is he all right on National Guard issues?

Mr. MONTGOMERY. He is right there, any time we need him.

Senator LOTT. I think that is the important thing we needed to know, Mr. Chairman. We are glad to have our colleague.

Senator Exon. I appreciate that very much, Senator Lott, because it removes a key question I was going to ask.

Congressman Montgomery, you are welcome to stay as long as you wish. If you have to get back to your duties over there on the Department of Defense Authorization Bill, we will understand. In any event, thank you for coming. You are always welcome.

Mr. Montgomery. Thank you.

Senator Exon. Now, Mr. Carmichael, would you please continue?

Mr. Carmichael. Yes. I was at the point where I have been here four months, serving as a consultant and advisor. I am very impressed with the process of changing government and administrations.

As I came on board I met John Riley, who was the Administrator and has now resigned. John was very helpful to me. He has worked with this Committee, I know, in depth, and long and hard. He is ill now. He has developed a pretty serious illness and I could not let today pass, or this time pass, without saying thank you to John Riley for what he has done and his help and support to me. He has spent hours briefing me on where FRA is, and was.

Then, Susan Coughlin, who is the Acting Administrator now and Deputy Administrator, has been another teacher whom I feel very attached to. I would like to report to you Mr. Chairman, and to the Committee, that I find the career people of the FRA staff to be excellent and the political people who have been appointed to be very dedicated. I come on board subject to your confirmation and approval at a very good time—a very interesting time.

I will submit my statement for the record—I will not go through it. I started to paraphrase it and go through it. I believe the railroad industry is a major player in the 21st century and I believe FRA has a major role to play in the new technologies that are coming on line—mag-lev and high-speed rail.

I know that my main role is to be safety-oriented from the very beginning to the very end. The new technologies require this as well. One cannot design a new train, high-speed or mag-lev without designing safety in right from the beginning. I hope FRA is deeply involved in these new technologies.

I see our industry, the railroad industry, in transition—both the industry itself and rail labor. I hope that as a generalist, as a transition person, I can hear the message of industry and of labor and help bring them together to get the railroad to be an equal player in the transportation system.

It is a huge mode. It has tremendous capacity. It is about 25 percent utilized! Our highways are having trouble with gridlock and our airways are too. Secretary Skinner is in the process of evolving a very exciting Transportation Policy.

He has allowed me, as a consultant, to be involved in it, I believe in the next six months you will see some real exciting decisions coming out the Department of Transportation. I hope that the railroads, the industry and its people, can play a major role in helping solve some of the transportation problems we have.

I would just like to submit this, Mr. Chairman, as my statement. I really appreciate it and I will be glad to answer any questions.

[The statement follows:]

STATEMENT OF GILBERT E. CARMICHAEL BEFORE THE SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

JULY 25, 1989

Mr. Chairman and Members of the Committee.

It is an honor for me to appear before you today and I thank you for this opportunity. I take great personal pride in the confidence expressed in me by the President of the United States when he nominated me to be Federal Railroad Administrator. It is a privilege to have the opportunity to become involved in the future of America's railroads, a subject I care deeply about. I have seen first-hand what happens to rail shippers, to communities, to entire economic regions when rail service is threatened---and when it prospers. It is my belief that America's railroad system is a vital component of a very safe, fuel-efficient, balanced national transportation system.

Most of my adult life has been in the field of transportation. It includes many years of involvement in advisory committees associated with traffic safety, motor vehicle policy, rail passenger service, and the like. For three years in the mid-1970s my principal avocation was involvement in the presidentially-appointed National Transportation Policy Study Commission. I developed a consuming interest in broader questions of national policy involving all transportation modes, especially the application of advanced technology. These three years as a federal commission member provided me with an in-depth picture of the nation's transportation system. My experiences in my home state of Mississippi involve advocacy of highway development programs, rail passenger service, motor vehicle regulation, and the preservation of a major freight railroad service in East Mississippi and West Alabama. When I speak of a balanced, fuel-efficient transportation system it is from direct personal experience in more than one of the modes.

My most valuable experience has related to regional railroad issues. In recent years thousands of miles of railroad have been spun off by the trunkline carriers. The rail map of many states was altered dramatically and permanently. Mississippi is such a state. With other community leaders, we pondered what these changed circumstances would mean to our economy. I joined with them in advocating the creation of the 700-mile Gulf and Mississippi Railroad. As a member of its advisory board I shared the frustration of raising capital, of finding maintenance money, of putting together an efficient operating team. I saw the new company get business, but damage cars because of the poor roadbeds. I saw it run out of money and finally helped merge it with another railroad. My knowledge of regional railroads was gained in the trenches and is real-world in its orientation.

There can be no higher priority for me as Federal Railroad Administrator than assuring that the nation's railroads are safe. That is the overriding responsibility, no matter whether the railroad under review is large or small, profitable or marginal. Much regulation has been put in place in recent years. It will be my job to administer and enforce that regulation in a manner consistent with the public's interest and the intent of Congress. I intend to do so. The Rail Safety Improvement Act of 1988 is excellent and gives FRA a vital new set of tools to improve safety. If confirmed, we will move quickly to implement your instructions.

The President and Secretary Skinner are committed to a drug-free America. I am committed to a drug-free transportation workplace, because transportation professionals are entrusted with the very lives of America's citizens.

President Bush is committed to building a better America. A healthy railroad system is a vital part of a balanced transportation system for America in the 21st Century. That is why I am so excited about Secretary Skinner's national transportation policy project. He intends to develop a forward-looking approach to the efficient movement of people and goods in a manner that emphasizes the strengths of each mode in a balanced network.

The President and Secretary Skinner are committed to environmental improvement. America's railroads are the one mode with considerable excess capacity. Other modes face gridlock. In promoting environmental improvement, I recognize the railroad as the logical mode for transporting hazardous waste if done so in a carefully controlled manner. With more than 140,000 miles of track nationwide, railroads provide a flexible system with the potential for high-volume, low-cost, and energy-efficient intermodal product delivery, as well as affordable passenger transportation.

Like many others, I have observed the achievements of Amtrak in upgrading the quality of its service and its improving revenues, while keeping its costs under control. I share Secretary Skinner's interest in pursuing strategies that will strengthen Amtrak's financial well-being. At the same time, I am committed to the preservation of a national rail passenger network as part of a balanced transportation system, and helping it be self-supporting and a vital part of the 21st Century.

The 21st Century may also bring with it the reality of high-speed rail and trains operating by magnetic levitation. I want to position the Federal Railroad Administration in a leadership role in the development of these innovations. The agency already has begun to prepare for its existing statutory role of developing and enforcing safety standards for these technologies.

Finally, it is my practice to reach out to people--Members of Congress, state and local officials, concerned citizens, the rail industry, labor, shippers, and the media. I feel it is important to be responsive to them, to communicate with them, and to learn from them.

If confirmed, I will be committed to open, frequent, and cooperative dialogue with you about these and other vital issues facing America's railroad system.

I thank you for your consideration. I would be pleased to answer your questions.

Senator EXON. Thank you. Without objection, your full statement is accepted for the record. Senator Lott, I would be glad to yield to you for any questions you might have as a follow-on to the Guard question. Do you have anything railroad-related that you would like to inquire?

Senator LOTT. Well the National Guard is rail-related, Mr. Chairman. I will be brief, because I want to make sure the Chairman has the bulk of the time to ask questions of this gentleman, since I know him so well and know how he feels.

You know, I enumerated in my opening remarks some of the direct involvement you had with transportation policy in the railroad industry, but would you just expand briefly on that, as to what you think your qualifications are for this particular position?

Mr. CARMICHAEL. To speak directly to the railroad industry itself, as an advocate of railroads and transportation in Mississippi I became very worried about the abandonment of railroad lines.

In East Mississippi and West Alabama we have a beautiful old railroad that used to be called the Gulf, Mobile and Ohio, the GM&O. Back in the early part of the 1980s the Illinois Central wanted to abandon this 700-mile railroad, or to sell it off. They were in the process of trying to sell it.

I became involved with our cities and the political structure to try to save the railroad. We helped create, through the advocacy of it—the first people who looked like they were going to buy the railroad gave us the signal that they might want to dismantle it and make several small short lines out of it—we went to work and helped create a new regional railroad, called the Gulf Mississippi.

We got all the cities together, and worked with the people interested in buying it. They bought it from Illinois Central and put together the Gulf Mississippi. The cities requested an advisory board. I served on the advisory board of that railroad—the new regional railroad.

I watched it go through strange financing. I watched it go after the business and get the business. I watched the new business come down the under-maintained railroad beds, and wreck. I saw this young new railroad struggling.

After it got the business, I saw it damaging cars. I saw it getting in terribly short supply for money—I saw it on the verge of going under. I went back into the field as an advocate for this railroad and helped merge it with the Mid-South Railroad. It is still a struggling railroad.

So this last seven or eight years with freight railroads and regional railroads concern me very much. There are about two or three hundred new ones. There are now about 400 regional railroads, or Class 2 and 3 railroads, in this country. Their condition, their health, and their safety is very important to me.

I come from rural America. These regional railroads connect small cities of rural America and these small cities do not need to lose the railroad track between them. I hope in this new transportation policy that is evolving I can help contribute solutions to saving these railroads and helping them get their business back and become a vital part again.

Senator LOTT. Just a couple more questions. Although I want to ask you a very broad, general question about what your goals are and what you hope to accomplish, I would rather ask, specifically, two questions.

Number one, I think that in the future the railroads could play a very key and important role in our country's further development. Secretary Skinner has indicated that we are going to have some new overall transportation policies. Railroads are going to play an important part of that.

There is a national defense angle to railroads. The MX missiles, for instance, would be on railroads. So how do you see that?

What can you do, and what are we going to do, to look to the future development of railroads? We are really way behind many other countries in modernization and modern usages of railroads. What can we do to make that move forward that we really need to make?

Mr. CARMICHAEL. I believe that Secretary Skinner's transportation policy actions that he is taking right now are addressing that already. They already recognize that the railroad industry has a tremendous capacity that is underutilized. I use the figure that it is about 25 percent utilized. There is a huge freight capacity on the railroads and a huge passenger capacity on the railroads, too.

Everything I observe in working with the other modes as a consultant, everything I see in working with highways and with FAA and others is that they too see the railroads making a major contribution. I believe we are going to see the railroads back as a key player in helping solve this problem of being behind other countries. I believe—I just feel confident that this will be one of the strong recommendations of the new policy.

I sat on a symposium yesterday. I heard an airline president say that he would like to see railroads bringing passengers to the airports. He was talking about high-speed rail and mag-lev, so the private sector is moving fast.

I believe you will see private investment in this. If the government will play the role of being an innovator and a stimulator, I think that we will see the private sector move and involve railroads considerably.

Senator LOTT. One major concern we have in this Committee and that I think all Americans have right now, is a concern for safety. I mean, we have regular incidents now where railroad cars jump the tracks or have other mishaps. We have had them here, along the northeast corridor, just this week. We had 14 cars jump the track and cause some problems, so I think this is an area where we really must focus.

But I am worried about FRA safety inspectors being able to keep up with advanced technology and do what we need to do to address the need for safer railroads. How do you respond to that?

Mr. CARMICHAEL. In this four months of observing FRA and seeing the technology that is coming on-stream—the double stacks and new type dispatching, just a very exciting complex of new things happening to the industry, I have recommended to the FRA that we start a training program.

We will continue our regular program of hiring inspectors but I recommended that we start a training program to hire young people out of college—junior colleges and senior colleges—who have a background and training in engineering, mechanics and electrical, through an apprenticeship training program. These are people who are quite up to snuff, in many cases, with the new technology of computers.

We are moving trains and operating the train system in this United States with huge central control systems now. Our inspectors are having to look over the shoulder of a computer dispatcher down in Jacksonville, Florida, and decide whether he or she is doing a good job of enforcing safety, so the safety division inspectors are really going to have to put themselves into high gear.

If I am right about this high technology and these new trains coming on line, then FRA must move aggressively to make sure its inspectors are really up to snuff. We have a training program started, that is being recommended.

Senator LOTT. I certainly agree on that and appreciate it, and I appreciate your indulgence, Mr. Chairman. I yield for any further questions at this time, so that you might ask some.

Senator EXON. Thank you, Senator Lott. Mr. Carmichael, I listened with great interest to your statement and especially that part with regard to John Riley.

John Riley, in the opinion of most of us, did a truly outstanding job in some very difficult circumstances from time to time, and I am pleased to know that he was able to consult with you in some detail, as you indicated to me when we had our conversation before you came to this hearing.

Let me ask you a few questions.

First of all, let us go back to the last question by Senator Lott concerning the Rail Safety Improvement Act of 1988, which is, I think, a very important act that we worked very hard on. That act required, as I am sure you know, the Department of Transportation to issue regulations by June 22nd, 1989, for testing, inspection and maintenance of signal systems and devices at railroad crossings.

This requirement seems especially pertinent since 700 people died at railroad crossing accidents in 1988, and that was approximately, near as I can find out, about a 10 percent increase over the previous year.

It seems, then, that we have to move in this area, and in your answers drafted in response to the pre-hearing questions, you mentioned that the FRA has drafted a notice of proposed rule making on this issue.

What other action would you propose as the Federal Railroad Administrator to address this need for improved safety, especially at our nation's railroad crossings?

Mr. CARMICHAEL. Mr. Chairman, let me first comment on the Rail Safety Improvement Act of 1988. I have been briefed thoroughly on that act, and it is excellent. It gives FRA new tools that FRA has not had before. If FRA uses them properly, it should improve safety across this nation considerably.

So, I congratulate the Committee on the Act—it is voluminous in its instructions to us. The locomotive engineers NPRM, for example, is about 300 pages right now. It was such a good, comprehensive act, that we are about halfway through with the 12 or 13 rules that are supposed to follow. The grade crossing NPRM is more than halfway finished.

The report was just issued the other day. In the next phase, if I am confirmed, I will get to work on getting that one finished and a decision made on it.

The 700 people that you referred to a minute ago in grade crossing fatalities is a very serious matter. The speed of the trains is improving and increasing the severity of the accidents. But, also, I am afraid that part of that severity is that vehicles are getting lighter, and lighter vehicles are hitting faster trains.

That is a big warning in the safety data to the FRA. We see that. It also will put emphasis under me, if I am confirmed, to get this grade crossing procedure completed.

Senator EXON. Thank you very much. Let me ask a follow-up to that.

In addition to the grade crossings that were included in that act, there were also mandated regulations covering the licensing of operators of locomotives and maintenance of way safety. Do you have a timetable for when all of these regulations can or likely will be promulgated? Is it a month, two months, six months? Where are we?

Mr. CARMICHAEL. Because of the seriousness and complexity of these 12 or so rules, I would say we are about halfway there, and with deliberateness, I believe we can be pretty well finished by the end of the year. That is just a pure guess, Senator. I must watch the process a bit more and have to understand that process a bit more, but it is an excellent Act.

For example, being able to put citations on employees, I think, will make both industry and the employees aware of their responsibility and safety. I think that is extremely good, and that is underway now.

Senator EXON. As you know, Mr. Carmichael, the Senate passed for fiscal 1990 reauthorization of $10 million for the Local Railroad Assistance Act. We are optimistic that the administration will continue its support for this funding level in the out years.

During a recent hearing of the LRSA program, the Association of State Highway Transportation Officials testified, and I quote, "The states believe it is essential for the federal government to continue to be involved in branch line preservation programs."

How do you reconcile what appears to be your belief that the states are adequately prepared to deal with the financial needs that affect local situations when the states themselves urge continued support and indicate that in most instances private funding would not have been available without the combination of federal and state seed funds?

Mr. CARMICHAEL. My state of Mississippi has been a big benefactor in the LRSA program. The administration right now and the Department of Transportation would compliment the LRSA on what it has done.

We do not have any recommendations, as I understand it, at this point for further use of our LRSA. The states have several good funds working. 20-odd states, I think, have their own funds.

One of the things I mentioned earlier is that the original railroads had to involve the private sector to help solve some of these problems. Coming out of the world of business, I hope I can make some contributions from that direction, and I hear the message of the states in what they are doing. But the administration position is we do not have a program for it right now.

Senator EXON. I have been particularly impressed with your involvement in the railroad there that you helped get turned around, although you testified again today that it still has its problems. The capital requirements of keeping up tracks and other capital requirements is a very, very difficult thing.

It is especially tough to borrow money, I would suggest, when the profits are not there on the balance sheet. But in that regard, I cannot tell you how pleased I am to recognize your support for Amtrak. The members of the committee—there are four of us sitting here now—have been very supportive of the Amtrak proposition.

I notice you have indicated that a carefully constructed and orderly process to move Amtrak to self-sufficiency is a reasonable, rational goal. I think that is the proper way to put it. I think that is another way of saying it is not going to reach that goal next year. It is going to be a few years down the road before we can reach that.

Is that basically your position?

Mr. CARMICHAEL. Yes. I think that Amtrak is making amazing strides with the equipment that it has, the cost controls, and they are building their revenues. They are to be congratulated on that.

I do see in maglev, for example, and in high-speed rail that the private sector is getting more and more interested in passenger transportation.

I believe as we move on in the rest of this century we will see Amtrak even more successful. I believe part of Amtrak's success is letting the market work and letting the private investors come in. It is up to this industry, the passenger side of the railroad industry, to prove that we can move people and move them at a profit. I would like to see that continued and be stimulated.

I have demonstrated in my resume that I am a strong supporter of passenger train service.

Senator EXON. We appreciate that.

Senator Pressler, I just have one more question, and I know you are pressed for time, and I would be glad to recognize you next.

Please briefly describe your views on proposals for the FRA to assume more of the leadership and safety advisory role in connection with the development of high-speed and magnetic levitation system in the United States.

Mr. CARMICHAEL. In your Rail Safety Improvement Act of 1988, "railroad" is defined and under "railroad" is included maglev, and is assigned to the Federal Railroad Administration by definition.

This new technology is really not new. We did extensive work on mag lev back in the seventies. As I saw Secretary Skinner yesterday on T.V., I think he said we packaged that technology a few years ago and put it in the box. The Germans picked it up and built one of them.

So, FRA has accumulated a wealth of knowledge and experience and work in the area of research in the new technology. You cannot build this new train, if you want to call it that, without doing safety at the same time. They have to be in concert.

So, I think FRA's role is to help by being an innovator and a stimulator and a creator of moving this technology on.

An interesting thing that is happening right now is that mag lev in Florida may become a reality in a fairly short time. The High-Speed Rail Commission in Florida issued a contract the other day to a group—which happens to be German and Japanese—German technology and Japanese funding. If they do not run into too many snags, we could see something under construction in a very few months.

Apparently the private sector has realized there may be big potential in manufacturing these goods and producing a passenger system. I would like to see FRA be one of the key players and take the leadership role.

I am going to try to sell the Secretary on it and anybody else who will listen.

Senator **EXON**. Thank you, Mr. Carmichael.

Senator Pressler.

Senator **PRESSLER**. Thank you, Mr. Chairman. I shall be fairly brief.

I welcome you here as the prospective administrator of the Federal Railroad Administration. I appreciate the kind words said by your colleagues from Mississippi whom I admire very much.

Let me also say that I have placed in the record a tribute to your predecessor, John Riley, and I urge that you follow John's example of accessibility and cooperation.

We have a particular problem in South Dakota regarding our Dakota, Minnesota and Eastern Railroad, a short line railroad. I think, incidentally, that the resurgence of the short line railroads in our country has been a very healthy thing, but much work needs to be done.

In our state we have a problem of moving grain, wood, bentonite, farm machinery, other products, and our traditional railroads have sought abandonment in some cases, and we have turned to short lines, which I think is a very important alternative for our people.

A lot of our farmers have as much as 60 cents a bushel in transportation costs before their grain is delivered to wherever it is going, and our public roads are being overused by heavy trucks. So, we all have a national interest in preserving railroads and good railroad service.

There have been a number of problems; I cite this railroad we have in South Dakota as an example. I know there are others like it around the country.

In fact, in some of our largest states, New York and California, there are short line railroads that are prospering and are making a great contribution. I am always worried that the big railroads will at some point take some predatory practices or something, but there is a synergistic relationship between the big and the small.

But, nevertheless, you as the Administrator will have to watch that closely because I think it is very important that the short lines be treated fairly.

I also urge you to give your attention to your responsibilities relating to railroad financial assistance programs. As you know, passage of the Staggers Act led to the creation of those 200 regional and short line railroads.

But many of those fledgling railroad companies are caught in a financial trap because of a lack of earnings history or past performance. As you know, financing packages often feature short repayment periods and high interest rates. This drains capital away from necessary rehabilitation.

The situation is compounded by drought and other economic problems in the Midwest. Reduced grain traffic means less revenue. So, there is clearly a public interest that is served when these lines are preserved.

I urge you to look for creative ways for the FRA to assist with this preservation effort, and your commitment to the local rail service assistance, LRSA program, is one example.

Section 505 loans and section 511 loan guarantees are other tools to help these small railroads.

Let me say I just rode a section of one short line from Rapid City, South Dakota, to New Underwood, South Dakota, where it is so important. But, in any event, I commend you, Mr. Chairman, for your assistance in short line railroads.

I would like to ask the witness, do you support the continuation of the Local Rail Service Assistance Program and what will be your commitment to securing funding for the program?

Mr. **Carmichael**. The position of the Department of Transportation right now is that we do not have any programs for LRSA.

I do come from the same section that you come from, Senator Pressler. That has been my genesis, coming from rural America and from small town regionals.

My approach first is to try to help them get their business back.

We have got a beautiful mode out here with tremendous capacity. Please give us some of our business back or include us in the transportation plan.

One of the problems that happened in my regional railroad is that, just like you said, it did not get financed properly. It had a lot of money for purchase at horrible interest rates, and no money for infrastructure rehabilitation.

The private sector, I think, will help produce the money for the infrastructure if the new national transportation policy says that we want the railroads back in business.

The present regional and shortline railroads you are talking about have got 30,000 miles of track. The big main lines want to give us another 20,000–30,000 miles more as they shrink. I have a deep commitment to your concern to helping the regional railroads get back in business.

If you look at the airlines right now, the feeder airlines, the big airlines are beginning to have a vested interest in them because they are being successful.

I look forward to the day when the regional railroads and small railroads or the feeder railroads become so exciting that we are worried about the big railroads taking them up again.

I want to keep them in business and successful.

Senator **Pressler**. Do you support the rejuvenation of the section 511 loan guarantee program? If so, what will be your specific commitment to securing funding for the program?

Mr. **Carmichael**. Senator, I have no comment on those two other than the fact that I want to work with FRA and its economists and come up with a plan to recommend to the Secretary to recommend back to this committee. Hopefully, there are some more ways to make the private sector do more things.

I cannot commit on either one of those at this time.

Senator **Pressler**. Would you check back with your people and submit for the record the most specific statement that you can on that point?

Mr. **Carmichael**. Yes, sir, I would be very happy to because I have the same concern that LRSA and the 505 and 511's have.

[The following information was subsequently received for the record:]

Senator, the LRSA, section 505, and section 511 programs were very important to saving railroad lines in Mississippi and all across the Nation in the Seventies and early Eighties. I believe that the most important problems for us to address now in strengthening small and regional railroads serving rural America and small cities were not directly addressed by those programs.

Most of the regional and shortline railroads that have become bankrupt recently did so in large measure because their operators paid too much for them and invested too little up front in rehabilitating their lines. I want to pursue initiatives in partnership with the private sector and the States to redress that imbalance in the formation of future regional and shortline railroads and to help all regional and shortline railroads recover as much as possible of the traffic in their markets.

I am also concerned that many of the existing financially fragile smaller railroads have no means to cope with expensive casualty losses such as the washout of a bridge. An event like that is no more than an expensive annoyance to a well-capitalized railroad, but can be calamitous for one that is thinly capitalized.

Solutions to these problems can be worked out in the private sector with State support and Federal participation. Of course, the specific details of these initiatives must be worked out with Secretary Skinner and the Administration, but I hope you will take some assurance from my background since the heart of my railroad experience lies in helping small railroads cope with problems like raising capital, restoring infrastructure, attracting business, and keeping it.

Senator **Pressler**. What is your opinion of the recent takeover craze in the railroad industry? Do you see this as a positive or negative force, and what will you do about it?

Mr. **Carmichael**. The LBOs, you are referring to that, sir?

Senator **Pressler**. Yes.

Mr. **Carmichael**. The leveraged buyouts, I hope there are some good LBOs out there. I see some bad ones.

The Office of the Secretary is in the process of evaluating a policy. I feel in my study that the ICC has some pretty good rules and regulations, which if enforced, could address that LBO situation.

Now, that is just an opinion.

Senator **Pressler**. One final point is that a recent USDA study predicted there may be a serious shortfall of grain cars starting as early as 1991 because the railroad industry currently is not investing in new grain cars. What do you think of that prediction and what can you do about it or what should we do about it?

Mr. **Carmichael**. The prediction scares me because it could have some truth in it. But one thing that may help keep it from being so dangerous is the new technology of movement of cars. The railroads can take 800 cars and do the work that 1,200 used to do. They have gotten to where they can move them faster, and they can move them a lot more strategically, and they can do a lot more work.

I think the technology that is coming on now will help alleviate that danger we see out there, and it is a danger.

Senator **Pressler**. Thank you. You come very well recommended, and we are glad to have you.

Mr. **Carmichael**. Thank you very much.

Senator **Exon**. Thank you, Senator Pressler.

Mr. Carmichael, let me just try and wind this down if there are no further questions by members of the committee. I am very much impressed with your credentials, your background, your experience, and from what we have learned here, there may be additional questions that will be submitted to you by members of the committee. If so, I would like to ask that you respond as quickly as possible to those questions.

I strongly support your nomination, and I sense that that is the general feeling of the committee. We will do everything that we can now that we have had this hearing to expedite the formal vote in the committee on the nomination.

Thanks for being here, and we welcome your family.

Any further questions, Senator Lott?

Senator **Lott**. No, thank you. Thank you, Mr. Chairman.

Senator **Exon**. Thank you very much.

Mr. **Carmichael**. Thank you very much, and I will answer quickly.

Senator **Exon**. We are adjourned.

[Whereupon at 2:52 p.m., the committee adjourned, subject to the call of the Chair.]

NOMINATIONS—JULY

MONDAY, JULY 31, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The committee met, pursuant to notice, at 8:03 a.m., in room 253, Russell Senate Office Building, Hon. Richard H. Bryan presiding.

Staff members assigned to this hearing: Linda Lance and Kevin Curtin, staff counsels; Becky Kojm, professional staff member; and Ruth Johnson, minority professional staff member.

OPENING STATEMENT BY SENATOR BRYAN

Senator BRYAN. Good morning. I take this opportunity to welcome all of you to this hearing on the nomination of Janet Steiger and Deborah Owen to serve as members of the Federal Trade Commission. Ms. Steiger has been nominated to serve on the FTC, and the President has indicated she will serve as Chair of the FTC. We are beginning especially early this morning because Senator Gorton and I these days are preoccupied with the Hastings impeachment proceeding, which involves some 12 members of the Senate.

The nominations to the FTC are an important matter, because the FTC has a special role to play in overseeing the marketplace. Congress has given the FTC responsibilities for ensuring that consumers are protected from unfair and deceptive acts or practices, and that unfair methods of competition are not practiced.

The FTC's role is vital, therefore, both to consumers and to the business community. The messages that it sends through its decisions, its guidelines and other means are relied upon in countless facets of commercial activity.

We need to have individuals appointed to the FTC who are committed to its mission, and the collegial atmosphere which Congress has determined is most appropriate to the agency. Internal divisions and confrontations with affected industries and other levels of government do not help the FTC to achieve its mandate.

I am pleased the President has submitted nominations to the Senate for its consideration, and I look forward to discussions with the nominees today about their views on the role of the FTC.

We will begin this morning with Ms. Steiger, followed by Ms. Owen. Before we do that, however, I would recognize any other members of the committee that want to offer an opening statement.

Senator **Stevens**. Mr. Chairman, I merely thank you for taking time to hold these hearings. It is very gracious of you, and we appreciate it.

Senator **Bryan**. I failed to acknowledge the role that Senator Conrad Burns has also on the Hastings impeachment panel. We will be over there together in just a few moments.

Senator **Burns**. We sure will, Mr. Chairman. I have no opening statement, although I regard these appointments as very serious. I come from a state that participates more in exports than in imports. And trade, of course, is very important to our state.

So I appreciate the chairman setting it at 8:00 in the morning. I wanted to start at 7:00 in the morning so we would have time to have a little coffee before we get to the Hastings trial.

We could not get Senator Kasten out and about. He is a Wisconsin boy. You know those dairy farmers; they are not used to getting up too early.

We appreciate it very much. Thank you, Mr. Chairman.

Senator **Bryan**. Thank you, Senator.

Senator Ford.

Senator **Ford**. I have no opening statement, Mr. Chairman. Thank you.

Senator **Bryan**. We are pleased to have two of our colleagues here to formally present the nominee.

First, I would like to call on a member of this committee and a former chairman of this subcommittee, Senator Kasten.

Good morning, Senator.

OPENING STATEMENT BY SENATOR KASTEN

Senator **Kasten**. Good morning, Senator. Thank you.

First of all, I'm pleased to be joined by my colleague, Herb Kohl. We present a united Wisconsin delegation in favor of Janet Steiger to be a member of the Federal Trade Commission.

I would simply like to make a couple of comments.

First, as you pointed out, I have been the chairman of the Consumer Subcommittee and I have also been the ranking member, and I know the importance of the Federal Trade Commission. A couple of hearings ago we talked about whether or not it was important that it be reauthorized, and we worked on some basic questions.

Janet Steiger has the ability to lead the Federal Trade Commission and to work with the Congress. She has worked with the Postal Rate Commission. She has been the head of that. She has got a distinguished record and a distinguished career, and I believe that she is uniquely qualified for this job at this particular time.

On a personal basis, I have had the opportunity to know Janet Steiger for a number of years. In the early 1970s I served with her former husband, Bill Steiger, as a member of the House of Representatives, and we were active in the Wisconsin delegation at that time. And Janet has had a distinguished career all during these years, going back to Oshkosh, Wisconsin and working through all the steps. She has a wonderful son, Billy, and is, I believe, a distinguished public servant.

And so I highly recommend this nomination, Mr. Chairman, and I am hopeful that because we are starting off at 8:00 in the morning on a Monday we might be able to clear this nomination this week, so that she has the ability to be at the Federal Trade Commission while we are in recess in August and get moving there. I am hopeful that the scheduling will permit that, and that in fact we can move this nomination through the committee within the next day or so and deal with the nomination on the floor before the Senate recess.

So I want to thank you for holding this hearing, and I strongly recommend Janet Steiger for this position.

Senator BRYAN. Thank you very much, Senator Kasten.

Senator Kohl.

STATEMENT OF HON. HERBERT KOHL, U.S. SENATOR FROM WISCONSIN

Senator KOHL. Thank you, Mr. Chairman, and members of the committee. It is a pleasure for me to join with my senior colleague, Senator Kasten, this morning in welcoming Janet Steiger before this committee.

The committee is here today to consider Janet Steiger's nomination to be chairman of the Federal Trade Commission. It is a position that I believe she will fill ably and successfully.

Janet Steiger has a long record of impressive public service. For the past eight years she has served as chairman of the Postal Rate Commission. She is also currently chairman of the Commission on Veterans Education Policy. Her skills in these and other capacities have been acknowledged by the Federally Employed Women of Washington, who honored Mrs. Steiger in her achievements with their Outstanding Woman in Government award in 1984.

Members of the committee, Janet Steiger is an exceptionally able public servant. She is as highly regarded in Wisconsin as she is here in Washington, D.C., and so it gives me great pleasure to be here today and to support her nomination to be chairman of the Federal Trade Commission.

Thank you, Mr. Chairman.

Senator BRYAN. Thank you very much, Senator Kohl.

[The biographical sketch and questions and answers follow:]

ERNEST F. HOLLINGS, SOUTH CAROLINA, CHAIRMAN

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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: STEIGER (Last) Janet (First) Mrs. William A. Steiger (Other)

Address: 323 Constitution Avenue, N.E. Washington, D.C. 20002 (Current residence)

Chairman, Postal Rate Commission (Business) 1333 H Street, N.W. Washington, D.C. 20268-0001

2. Position to which nominated: Federal Trade Commission

Date of nomination:

3. Date of birth: June (month) 10 (day) 1939 (year)

Place of birth: Oshkosh, Wisconsin

4. Marital status: widowed

Full name of Spouse: William Albert Steiger

5. Names and ages of children: William Raymond Steiger, 19

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Lawrence University, Wisconsin	9/57 - 6/61	B.A.	6/61
Reading University, England	9/61 - 9/62	(on Fulbright)	
University of Wisconsin, Madison	9/62 - 9/63	Teaching Certificate	6/63
University of Wisconsin, Oshkosh	6/63 - 8/63		

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of employer	Address	Type of work
3/81	present	Postal Rate Commission	1333 H Street, N.W. Washington, D.C.	Chairman
10/80	3/81	Postal Rate Commission	20268-0001	Commissioner
9/76	10/80	The WorkPlace, Inc.	Washington, D.C.	Vice President
8/78	11/79	National Academy of Public Administration	Washington, D.C.	Research Associate (contract)
7/78	7/78	American Association of Community & Jr. Colleges	Washington, D.C.	Consultant
10/77	4/78	American Bar Association	Washington, D.C.	Writing Handbook (contract)

Continued on p. 10

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

Local: While working at the University of Wisconsin Extension Division in Madison, 1964-65, I edited a handbook for local law enforcement officers: Law Enforcement and Juvenile Justice in Wisconsin.

State: Worked on staff of Governor Warren P. Knowles, Wisconsin, 1966.

Federal: Chairman, Postal Rate Commission, 1981 to present; Chairman, Commission on Veterans' Education Policy (P.L. 99-576), 1987 to present; Liaison member, Administrative Conference of the U.S., 1981 to present; Executive Women in Government, 1981 to present (president 1987).

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

For more than 20 years, I have been a member of the Republican Party. In 1979-80, I was co-chairman of Wisconsin Bush for President. My husband was U.S. Representative of Wisconsin's 6th Congressional District from 1967 until death in 1978. While not an officer of his election committee, I was actively involved with each of his campaigns. For several years I also served as legislative-issues leader of the Republican Congressional Wives. In the past 10 years I have given many talks and formal speeches to a variety of audiences ranging from service clubs to Lincoln Day dinners. I was a Bush Caucus-Team speaker at the Republican National Convention in 1988 and a surrogate speaker for Bush-Quayle '88. Financial contributions for the past 10 years are listed on Attachment A.

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Mortar Board

Phi Beta Kappa

Executive Women in Government, president, 1987

Delta Gamma Sorority

Capitol Hill Restoration Society

International Neighbors Club IV

Trustee, Lawrence University

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

"Outstanding Woman in Government" award, 1985, from the Federally Employed Women of Washington

Phi Beta Kappa

Mortar Board

Fulbright Scholarship

Woodrow Wilson Scholarship, and various collegiate academic awards

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

- Janet D. Steiger, Ed., Law Enforcement and Juvenile Justice in Wisconsin, University of Wisconsin Extension Division, Madison, Wisconsin, 1965.
- Nora Jean Levin and Janet D. Steiger, To Light One Candle; A Handbook for Organizing, Funding and Maintaining Public Service Activities, American Bar Association, April, 1978. Second printing, 1979.
- Harold Orlans, Nora Jean Levin, Janet D. Steiger, and Joseph C. Colmen, GI Course Approvals, Senate Committee Print No. 16, 96th Congress, 1st Session, October, 1979.
- National Academy of Public Administration, Major Alternatives for Government Policies, Organizational Structures, and Actions in Civilian Nuclear Reactor Emergency Management in the United States, NUREC/CR-1225, January, 1980. (Note: Section IV was the responsibility of Nora Jean Levin and Janet D. Steiger)

Attachment A Janet D. Steiger

9. (cont.) Financial contributions to political parties and election committees:

1979	Bush for President	$100
1980	Petri for Congress	150
	Pennsylvania Caravan for Bush	80
	Bush for President	150
1981	Winnebago County Republican Women	8
1982	Chapman for Governor Committee	50
	Citizens for Joel Pritchard	100
	Citizens for Betty Anne Kane	100
	Fenwick for Senate Committee	50
	Friends of Prescott Bush	100
1983	National Federation of Republican Women	50
	Winnebago County Republican Women	25
1984	The Campaign Fund for Republican Women	200
	Deborah Jacobson Campaign	25
	Elise duPont '84	50
	League of Republican Women, D.C.	18
1985	The Campaign Fund for Republican Women	50
	D.C. Republican Women	50
	Fund for America's Future	50
	Kasten for Senate	50
	National Federation of Republican Women	50
	The Campaign Fund for Republican Women	10
	Winnebago County Republican Party	15
	Citizens for Tom Petri	50
1986	The Campaign Fund for Republican Women	50
	Carrie Francke for Congress	50
	Fund for America's Future	50
	Lukens for Congress	50
	Kasten for Senate	150
	Citizens for Kane	25
	Committee to Elect Linda Topping	50
	Carol Schwartz for Mayor	25
	Connie Morella for Congress	25

1986 (cont.)		
	Carol Schwartz for Mayor	25
	Attorney General Arlene Violet Committee	25
	Republican Party of Wisconsin	30
	Linda Chavez for Senate	15
	National Federation of Repubican Women	50
	Campaign Fund for Republican Women	25
1987	National Federation of Republican Women	50
	Bobbie Kilberg for State Senate	150
	D.C. Republican Committee	20
	Republican Congressional Wives	10
1988	Trent Lott for Mississippi	25
	Joel Pritchard Committee	75
	GOPal	25
	League of Republican Women, D.C.	25
	Friends of Connie Morella	25
	Republican National Committee	250
	GOP Women's Political Action League	50

Prehearing Questions and Answers
of
Janet D. Steiger

Question 1. What do you perceive to be the major role or mission of the Federal Trade Commission (FTC)? Is there another entity, public or private, that may be better suited to performing this role or mission?

Answer 1. The major role of the FTC is the protection of the welfare of the consumer through the enforcement of Federal antitrust and consumer protection laws.

Its mandate, to foster marketplace competition and prevent deceptive or unfair acts and practices, is essential to a healthy free economy and informed consumer choice.

The FTC's expertise in analyzing complicated economic issues and market arrangements, and its flexibility in crafting remedies are often cited, I think correctly, as strengths of the Commission's antitrust work. The FTC's shared antitrust jurisdiction with the Department of Justice seems to have worked smoothly, and I see no reason it should not continue to do so.

The agency's extensive expertise in the protection of the consumer from fraud and deception is unique and essential to the public interest. The FTC also performs valuable functions in providing guidelines to business and information to consumers. The agency remains singularly qualified to offer analyses of the operation of major U.S. businesses, the functioning of the free market, and the nation's antitrust system.

Question 2. In your opinion, what is the most important responsibility of the Chair of the FTC? If you are confirmed as Chair of the FTC, what will be your highest priorities with regard to management issues, and specifically how will you seek to implement those priorities?

Answer 2. I believe that the most important responsibility of the Chair of the FTC is to establish, in conjunction with the Members of the Commission, an agenda for vigorous fulfillment of the agency's obligations, including setting priorities. Of course the Chairman of the Federal Trade Commission, like the Postal Rate Commission Chairman, bears primary responsibility for the effective allocation of Commission personnel and resources. Ongoing consultations with the Commissioners and expert staff are critical to the successful fulfillment of that obligation.

If confirmed I will do my best to execute faithfully all responsibilities of the Chair, and I focus here two areas in particular. First, I believe that continuing dialogue with the states and other government entities regarding the best cooperative use of scarce resources, and the provision of appropriate information to the Congress, should be given high priority.

Second, I would pursue a management initiative at the FTC that uses automated technology to best advantage to facilitate the assembling and analysis of information by the staff and agency managers. Effective use of the Commission's information resources can contribute materially to the agency's productivity and impact. I have been able to achieve significant efficiency gains, with the help of skilled staff, at the Postal Rate Commission.

The PRC technical staff, in a rate case, has the computer capacity to produce for analysis a trial alternative rate schedule, together with its probable volume and cost effects, with not much over one hour's work. I am told that in the mid-1970s a similar job took several people a day or longer. We are also now developing an "electronic docket room" which we hope will store our past and current case records on optical disks and make them more accessible to litigants, the public, and our own staff.

Question 3. What areas of present FTC activity do you believe should be given the highest priority? Please specify the reasons for your choice.

Answer 3. While no area of the FTC's responsibilities should be ignored, its resources should be concentrated on practices most likely to injure consumers. The greatest attention should be paid to horizontal mergers and practices facilitating cartel-like behavior because they are most likely to adversely affect price, product availability and the health of the free-market economy. In both the antitrust ~~and~~ consumer protection areas, the FTC should continue to share its expertise and to maintain an active and current consumer education program. Vigorous action against prevalent and potentially prevalent fraudulent activities threatening substantial consumer injury, and continued vigilance regarding deceptive and unfair advertising, should remain highest priorities.

Question 4. In light of budgetary constraints, are there particular FTC activities that you believe should be redirected or discontinued? Please specify.

Answer 4. The answer to this question requires examination of the FTC's workload and actions already taken in response to budgetary constraints. Until I can carefully study the Commission's programs in detail, it would be premature to offer specific suggestions. In general, I know well from my experience at the Postal Rate Commission that setting priorities is demanding but absolutely critical. For an agency with jurisdiction as broad and diverse as the FTC, the selection of the most effective set of activities requires great discipline. I recognize the crucial role the Chairman must play in the budget process.

Question 5. Are there any areas in which you think the FTC Act should be amended in order to enhance the FTC's ability to enforce its mandate? If so, what are those areas and what changes do you recommend? Are there any areas that should be cut back, transferred, or redefined through legislation? What about other statutes administered or enforced by the FTC?

Answer 5. I welcome legislative clarification where uncertainty exists, because a clear Commission mandate is in both the agency's and the public's interest. The Commission on its own initiative should make every effort to clarify its positions, review past actions for current applicability, and offer guidance to parties affected by its enforcement authority.

I support the appropriate enhancement of the Commission's authority to combat consumer fraud in a timely fashion. See my answer to Question 15. The other statutes enforced or administered by the FTC reflect the judgment of Congress that the agency has a necessary role to fulfill, and I have no changes to suggest. If I am confirmed and later conclude that legislation would help the Commission to fulfill its mandate, I will so advise this Committee.

Question 6. Critics have sometimes asserted that there is no need for two antitrust agencies -- the Federal Trade Commission and the Justice Department. What is your view?

Answer 6. As I said in response to Question 1, the shared jurisdiction seems to work well. The Special Committee of the American Bar Association Section of Antitrust Law (the Kirkpatrick Committee) recently reported it was the conclusion of the majority that a case had not been made for abolishing dual enforcement. They believe the arrangement has benefits and creates only limited costs. Similar positions were taken by antitrust experts testifying before this Committee during the June 7th and 8th FTC Reauthorization hearings. I do not propose change in this area.

Question 7. What areas of the FTC's antitrust enforcement authority would you emphasize and which would you deemphasize? Why? In your answer, please specifically address enforcement in the areas of: (a) conglomerate and vertical mergers; (b) vertical non-price restriction; (c) resale price maintenance; (d) predatory pricing; and (e) price discrimination.

Answer 7. The Commission must enforce all the laws over which it has jurisdiction. Of course, efficient use of resources requires that the most serious tasks be given priority. For example, activities adversely affecting competition that are highly prevalent in the marketplace, or those that cause significant harm to the consumer and the economy deserve the highest enforcement priority.

Of the specific problem areas mentioned, I would begin by distinguishing between those that are or are likely to be anticompetitive in one way or another, and those that use the classical techniques of legitimate price competition for anticompetitive ends. In the first group I would put horizontal mergers, and some vertical price restrictions. For conglomerate and vertical mergers, the statutory test is the same as for horizontal ones between direct competitors; that is, whether the merger tends to lessen competition or promote monopoly. The analysis of vertical and conglomerate mergers is more difficult, though, since it is not so clear how competition is affected. The argument sometimes takes the form of inquiring whether they can, or in fact do, tend to enhance efficiency. Conglomerate and vertical mergers thus have to be looked at attentively on a case-by-case basis. Resale price maintenance is illegal per se, and effective enforcement of the law as it now stands requires recognition of existing court criteria for this violation. Vertical non-price restrictions are to be judged by the rule of reason test, requiring proof of net anticompetitive effect before allegations of illegality can be established. I am aware that there is considerable interest in legislatively modifying the Sharp and Monsanto decisions' definition of resale price maintenance, and that S. 1249 calls on the FTC to report twice yearly on its resale-price-maintenance related activities. As the Kirkpatrick Committee Report noted, the distinction between procompetitive and anticompetitive vertical restraints is difficult to draw. Nonetheless, I agree with that Report that the FTC may be able to provide some useful guidance in this area.

Predatory pricing and, in some instances, price discrimination present analytical challenges since (i) they use what in general is a procompetitive mechanism -- price cutting -- to gain anticompetitive ends in the longer run, and (ii) they require analysis of the costs of production. My experience at the Postal Rate Commission has shown that determination of costs of production can be quite difficult, controversial, and time consuming. To judge from published decisions, the courts have experienced similar problems in antitrust cases. Nonetheless, the FTC must distinguish between predatory practices that harm the consumer and robust competition which enhances consumer welfare. This may entail looking generally at the affected market, because whether a practice is properly deemed to be predatory pricing or vigorous price competition can turn on the presence of entry barriers, or other anticompetitive factors. Again, I note that Congressional interest in this problem is expressed in S. 1249; Sec. 14(a) of the bill requires semiannual reports on FTC activities with respect to predatory pricing.

Question 8. What statutory changes would you suggest, if any, in the FTC's authority to regulate advertising?

Answer 8. The FTC's authority to regulate advertising is broad and buttressed by extensive case law. A clarification of the scope and definition of the concept of unfairness could be useful. I am inclined to support the definition proposed in the Senate FTC Reauthorization legislation of 1989 (S. 1249). While it is possible that a prohibition against use of the Commission's unfairness jurisdiction for industry-wide rulemaking could preclude beneficial future action, the preservation of case-by-case application allows the Commission to continue to develop clear and reviewable guidelines for the application of the doctrine.

Question 9. Do you believe the FTC's program in the area of advertising substantiation has been effective? What changes, if any, do you believe should be made in such a program?

Answer 9. Since the *Pfizer* holding in 1972 that an affirmative product claim required a reasonable basis for making that claim, the FTC has reaffirmed its support for advertising substantiation and refined its requirements. The FTC's 1984 Policy Statement enumerated factors to be weighed in determining the appropriate level of substantiation including, among others, the product involved and the consequences of a false claim. Commission decisions suggest a higher level of required substantiation for health and safety claims. Expert opinion regarding reasonable levels of substantiation has been considered. While some commentators have criticized particular details of the policy, I can find no disagreement with the principle that an advertiser should have a sound basis for material advertising claims. This principle protects the consumer and offers useful guidance to advertisers. The guidelines in the 1984 Policy Statement aid the Commission in its difficult task of ensuring that the level of substantiation does not prevent the consumer from receiving potentially valuable product information, and yet offers protection from deceptive claims. The programs seem to be generally successful. If there are areas of the policy that need clarification, the Commission should be able to offer it either through further policy statements or other appropriate avenues.

Question 10. Do you have any views as to whether or how corrective advertising might be used effectively in cases where false and misleading advertisements have been presented to the public?

Answer 10. Court review of the FTC order in the *Warner-Lambert Co.* case regarding "Listerine" upheld the agency's authority to require corrective advertising when a deceptive advertisement has played a significant part in creating a "false and material belief" that lingers in the public's mind even after the ad is stopped. The Commission has exercised that authority in other cases, albeit rarely, determining the duration and amount of corrective advertising on a case-by-case basis. I do not, at this time, have any specific suggestions as to the circumstances in which it should be used, but I think corrective advertising can be a useful consumer protection tool. Case-by-case analysis of the duration, extent and potential for harm of the false ad, among other factors, would seem to be a reasonable approach. Here, as elsewhere, the Commission should articulate, if needed, guidelines for application of this remedy.

Question 11. Should FTC rules be subject to systematic congressional review? What specific form should such a review take?

Answer 11. The FTC should be subject to the same congressional review as any other Federal department or agency. If the agency fulfills its duty to assist the committees of Congress in their oversight responsibilities by detailing its goals and priorities, and by promptly communicating the justifications for its actions, ongoing congressional review is a given. S. 677 introduced in the 100th Congress contained a proposal to create a legislative veto; even without such a mechanism Congress can always remedy a situation where it concludes the agency has misapplied the statutory mandate.

Question 12. Section 3 of S. 1249, the FTC Act Amendments of 1989, makes permanent now temporary restrictions on the Commission's authority to study or investigate an agricultural marketing order or certain conduct of an agricultural cooperative. In addition, Section 3 requires the Commission to notify and consult with the Secretary of Agriculture before issuing an antitrust complaint against an agricultural cooperative. What is your opinion of these restrictions?

Answer 12. The Capper-Volstead Act empowers the Secretary of Agriculture to issue cease and desist orders against cooperatives there is reason to believe may be monopolizing or restraining trade with resulting undue price enhancement.

As I understand S. 1249 it represents a carefully-drawn delineation of areas appropriate, and others not appropriate, for ordinary antitrust administration. That is of course a legislative judgment. As a general matter of sound administration, it seems not inappropriate for the FTC to notify and consult with the Secretary, given the obviously relevant expertise of the Department.

Question 13. Would you support repeal or modification of the McCarran-Ferguson Act so as to allow the Federal Trade Commission and other federal agencies to regulate the business of insurance?

Answer #3. One would want to fully understand the regulatory authority of the states in considering this question. Antitrust experts question industry-wide antitrust exemptions. Limitations on even the study of an industry have also been criticized.

Question 14. What is your view of the importance of the Robinson-Patman Act, and the FTC's role in enforcing that Act?

Answer 14. The Robinson-Patman Act empowers the FTC to proceed against unlawful price discrimination. Discrimination unjustified by cost, or certain other defenses, may injure competition and promote monopoly power. I recognize that substantial controversy has arisen about enforcement of the Robinson-Patman Act. Nonetheless, the FTC is charged with enforcing the law and must give careful consideration to allegations of anticompetitive pricing practices. The Commission must be particularly careful to apply the Robinson-Patman Act in ways that will not hamper legitimate price competition. As I noted in response to Question 7, although the necessary determination of the cost of production may be very difficult, the Commission must undertake analyses to distinguish as best it can between pricing practices that cause consumer harm and those that foster competition and hence consumer welfare.

Question 15. What suggestions, if any, do you have for improvements in the way the Federal Trade Commission combats consumer fraud?

Answer 15. The FTC should continue to identify and target practices that result in significant consumer harm. Less prevalent schemes with the potential for serious harm or exponential growth should also be identified. The initial experience of the joint FTC - National Association of Attorneys General (NAAG) clearinghouse on telemarketing fraud suggests similar programs to share law enforcement information in other areas may be fruitful. Several models have been suggested for working groups composed of FTC, NAAG, and other appropriate enforcement agencies to identify areas of possible cooperation and pooling of resources. Whatever the model used, such collaboration should be given high priority.

Further legislation may be useful. The addition of section 13b to the FTC Act is widely regarded as an invaluable aid to FTC antifraud enforcement. Given the speed with which boiler-room activities can close and reopen, however, if there are statutory initiatives that could speed FTC action, they should be explored. Senators McCain and Gore have both introduced legislation in this area. I understand consideration is being given to providing the FTC authority to obtain production of physical evidence in response to a civil investigative demand and to obtain mail covers in its fraud investigations. This Committee should be commended for addressing these important issues, and I look forward, if confirmed, to working with the Committee on any further suggestions the Commission or others might develop.

Senator **Bryan**. Ms. Steiger.

STATEMENT OF JANET STEIGER

Ms. **Steiger**. Thank you, Mr. Chairman. I am most appreciative of the courtesy of the committee in holding this hearing this morning. I realize your schedules are awesome.

I have a very brief statement. I would like to say that I am deeply honored to be here as a nominee to the Federal Trade Commission, and I am honored by the introduction of Senators Kasten and Kohl, and the confidence the President has expressed by placing my name in nomination.

I feel particularly honored by this nomination because I have long believed that free political institutions are least at risk when economic opportunity is also free, when competition is healthy and procedures are fair. Our idea of a free market requires that competitors really compete and that the consumer choices on which the whole system rests are made with complete and truthful information. I look forward to being part of the team that protects that free market system and the nation's consumers.

Let me assure you that if confirmed, I will make the utmost effort to carry out the Commission's mandate fairly, vigorously and expeditiously. I do not make that promise offhandedly, since eight years as a regulatory commission chairman have taught me that the issues are likely to be difficult and the schedules demanding. But it is a promise I am happy to extend to you.

I also look forward to working closely with this committee and the Congress as a whole and with my fellow commissioners in improving the processes of antitrust enforcement and consumer protection.

Thank you, Mr. Chairman.

Senator **Bryan**. Thank you very much, Ms. Steiger. You bring a very impressive background in terms of work experience and in terms of academic credentials as well.

As you know, the FTC has not been without controversy, and one question that I would like to ask initially is the relationship, as you conceive it, between the attorneys general of the respective states and the Commission. As you know, there has been some contentiousness between the Commission and the attorneys general, and you bring a record here of working well in the commission context.

And many of your supporters would acknowledge the fact that you have done a considerably impressive job in restoring what some perceive to be some internal discord before you joined the Postal Rate Commission. So let me ask you to respond to that, if you will.

Ms. **Steiger**. Mr. Chairman, the state attorneys general have a crucial role to play in the protection of this economy and of the consumer. I think there have been very important signs of interest in establishing a better cooperative relationship in sitting down together to attempt to assess priorities and the most appropriate use of resources in what is, admittedly, a time of scarcity of resource.

I very much look forward, if confirmed, to meeting as soon as possible with the state attorneys general on these mutual concerns, and hopefully to following through on the suggestion from many parties that a working task force be established.

Senator **Bryan**. You mentioned resources in your response. Have you had a chance to review the Commission's workload, and are you satisfied that the resources that you have are sufficient to undertake the task?

There have been, as you know, considerable comment that we have received as members of the subcommittee that the Commission's activities are underfunded in terms of resources made available.

Ms. **Steiger**. That is very difficult to tell from outside, as you know, Senator. I am very well aware of the Kirkpatrick report's concern that there is a staffing lack. I do know that the Commission's staff enjoys a very high reputation.

I would look forward to analyzing, along with my fellow commissioners, the needs and the workload, both for the allocation as efficiently as possible of what there is and for any further recommendation if we feel it is necessary for additional personnel and resources. I do realize this is difficult in the time of budget constraints.

Senator **Bryan**. Could you share with us your philosophy in terms of the operation of the agency?

Ms. **Steiger**. This is a collegial body. I firmly believe that each and every commissioner is going to have a lot of input and a lot of talent. I would look forward to working with them in attempting, again, the most efficient allocation of these resources for a vigorous enforcement of the mandates that come under the purview of the Commission.

Senator **Bryan**. Now, I believe in your discussion that you do have some assets that could potentially involve a conflict of interest, and I believe it is your desire to have those placed in a trust so that you will not have to recuse yourself. Have you undertaken those steps at this point to do that, or is it your intention to do so, as was originally contemplated?

Ms. **Steiger**. My intention is to create a qualified, diversified blind trust as soon as confirmed. And I believe that that is pretty well near the finish line as far as being ready to go. I am anxious to do it as soon as possible so that I am able to fully undertake the work of the Commission, if I go there.

Senator **Bryan**. Should you be confirmed—and it is my full expectation that you will—would you notify the subcommittee when you have, in effect, created that trust?

Ms. **Steiger**. I certainly will, sir.

Senator **Bryan**. I have no further questions. I would yield to Senator Ford, former subcommittee chairman himself.

Senator **Ford**. If you want to get the others who came in earlier, that would be fine.

Senator **Bryan**. Senator Stevens.

Senator **Stevens**. Thank you very much, Mr. Chairman.

The Chairman of the Postal Rate Commission and I have worked together for a long time. Her husband and she came to Washington the year before I did. We lived across the street. I do not think any questions I might ask now would add to that continuum of confidence I have in Mrs. Steiger.

Thank you very much.

Senator **Bryan**. Senator Burns.

Senator **Burns**. I thank you, Mr. Chairman.

I just got here in January. I have not lived across the street from Mrs. Steiger.

I realize that the responsibilities of the Federal Trade Commission are very broad—are you familiar with the Canadian Free Trade Act?

Ms. **Steiger**. I am not, sir.

Senator **Burns**. Are you, let us say, knowledgeable of our relationship with the trading of goods and services between the United States and Canada? Are you familiar with the activities between our two countries?

Ms. **Steiger**. In a general sense, sir.

Senator **Burns**. Okay. Those are the only questions I have.

Thank you.

Senator **Bryan**. Thank you very much, Senator Burns.

Senator Kasten.

Senator **Kasten**. Mr. Chairman, thank you.

Since I introduced Janet Steiger, obviously I actively support her nomination. As I said, I hope that we can deal with this nomination very expeditiously.

I would like to use this opportunity, though, to bring to your attention, Janet, a pending issue that you are going to be facing as part of your new responsibilities; and I am confident that you will be confirmed. Last summer the Federal Trade Commission voted to reinstate a dairy merger reporting program. It had been terminated by the Commission in 1981 when the GAO approval of the existing reporting forms expired.

Its resumption in July 1988, after a long internal dispute within the Commission and then a subsequent difference of opinion between OMB, is causing considerable concern by the dairy processing community. And as a fellow Wisconsinite, I know that you are going to understand as much or more about dairy and dairy processing than most members of the Federal Trade Commission.

But small fluid milk producers across the country now face what they feel are onerous and unnecessary requirements of pre-merger notification, and this is all in addition to those that are already required by the Hart-Scott-Rodino Act. When you get settled at the FTC, you are going to find that the dairy industry, through the Milk Industry Foundation and the International Ice Cream Association, is now seeking a formal reconsideration of the Commission's decision to reinstate this program, and they are also making a considerable effort to get to the Commission staff also.

So I do not want you to prejudge the case in any kind of way. I realize you have had no opportunity to review the facts, but I hope that you would be willing to give this matter your full and early attention and work with me and others in this regard. It is becoming an important issue to the dairy industry, and I know that you and I share a keen interest with regard to the dairy industry in Wisconsin.

I just want to ask, can we look forward to your attention on this important matter?

Ms. Steiger. I would be happy to turn my attention to it if confirmed, Senator, yes, indeed, and to confer with this committee and with you on that issue.

Senator Kasten. Thank you.

Mr. Chairman, thank you.

Senator Bryan. Senator Ford.

Senator Ford. Thank you, Mr. Chairman.

Ms. Steiger, you referred at least twice in your opening statement, which was brief and did not hurt you any——

Ms. Steiger. It is worrisome to find out it might not have helped either.

Senator Ford. But you made two references to free trade, free market. My good friend and colleague from Montana is worried about the Canadian free trade agreement. I voted against it. I am not sure that I was right, but history has a way of either confirming or making you out wrong.

What do you mean by free trade? What do you mean by free markets? What do you mean in that connotation of free market?

Ms. Steiger. An economy as unfettered as possible by either government or other regulation. Nonetheless, since we do not live in a perfect world——

Senator Ford. We do not have perfect commissions either.

Ms. Steiger. That is true. One would hope that the role of the FTC which Congress has seen fit to give it, which is the protection of the antitrust laws and of the consumer, contribute to keeping the market as level a playing field as possible; that is what I mean by a free market.

Senator Ford. Do you know—and I do not—whether you would have any jurisdiction over products made overseas for an American company that would come into this country? Do you have any jurisdiction in that arena?

Ms. Steiger. Well, certainly the merger provisions take account of foreign competition, and to the extent that this commerce would affect American commerce, it would come under the purview of the FTC.

Senator Ford. Only under mergers?

Ms. Steiger. It would also have consumer effect implications as well, sir.

Senator Ford. We have learned over the months and years that if an American company can buy labor in some other country and produce a product that is saleable here at less wages, they do it. Sometimes I am concerned about the copies of products.

Do you have any opportunity to visit the copies of products, the false sale of products by a different name or look alike? Would that come under yours or would that come under Consumer Product Safety Commission?

Ms. Steiger. The Commission has turned its attention to this in the past, and I would be concerned about deceptive labeling. That is part of the concern, labeling and advertising that would be deceptive, yes.

Senator Ford. You really have your hands full if we get into that arena in a major way, and I think you should. We will be looking over your shoulder, and we look forward to working with you.

Thank you, Mr. Chairman.

Senator BRYAN. Thank you, Senator Ford. We have been joined by Senator Pressler. Senator Pressler, good morning.

Senator PRESSLER. Mr. Chairman, I have no questions for Ms. Steiger at this time.

Senator BRYAN. Ms. Steiger, we look forward to working with you and we will be processing this in due course, as Senator Kasten has suggested.

Ms. STEIGER. Again—and again, my thanks to the Committee for meeting this morning and to both of my senators.

Senator BRYAN. I would make you aware, there may be some additional questions. We are going to hold the record open for colleagues who may have some additional questions in writing they may submit to you, and ask that you submit a prompt response if there are additional questions.

Ms. STEIGER. I will be happy to do so, sir. Thank you.

[The following information was subsequently received for the record:]

Answers of Janet D. Steiger
to
Post-Hearing Questions of Senator Bryan

Question 1. You have functioned as the Chairman of a collegial body, the Postal Rate Commission, for the past 8 years. What, if any, differences would you anticipate in your administrative duties as Chairman of the FTC?

Answer 1. I would hope to continue to work with the Commissioners in establishing a clear agenda and priorities for the FTC's varied responsibilities. As I noted in response to prehearing questions, the FTC Chairman, like the Postal Rate Commission Chairman, bears primary responsibility for effectively allocating personnel and resources, but ongoing consultations with the Commissioners and expert staff are critical to success of that effort. Given the size of the staff and the broad scope of Commission responsibilities, I would presume appropriate delegation and internal oversight would be even more crucial.

Question 2. In your view, what is the extent of the FTC's responsibility to provide information about its activities to Congress?

Answer 2. As noted in my prehearing listing of priorities, I believe that the provision of appropriate information to Congress is vitally important. The agency has a duty to assist the committees of Congress in their oversight responsibilities by detailing its goals and priorities and by promptly communicating the justifications for its actions. Of course there are some areas where Congress has authorized or required confidential treatment: Hart-Scott-Rodino premerger filings are one example. Like the Postal Rate Commission, the Federal Trade Commission holds some proceedings where the FTC Act provision and the general principle of administrative law prohibiting *ex parte* communications will apply; and there are situations where the Commission, or a Commissioner, cannot properly be asked to take and publicly justify a position on matters pending for decision.

My experience at the PRC indicates to me that neither Congressional oversight nor Congressional suggestions that an area may need investigation -- under conventional agency processes -- is something to fear. I think the relationship can be helped greatly if the agency lets Congress know, promptly and openly, of major actions that are appropriately of interest to legislators, while at the same time keeping in mind that it alone has the responsibility for deciding particular matters fairly and under applicable law. In short, I believe that generally information requested by the Congress should be promptly supplied. If an agency has a good track record of following these principles its oversight and informational relations with Congress should go smoothly.

Question 3. The National Association of Attorneys General (NAAG) and the Antitrust Division of the Department of Justice recently have formed an executive working group, and the new head of Justice's Antitrust Division, Mr. Rill, has indicated his intention to form an "Enforcement Partnership" with the State Attorneys General. At its recent summer meeting, NAAG approved a resolution supporting the development of an "Enforcement Partnership" with the FTC. What do you believe to be the proper nature of the working relationship between the state attorneys general and the FTC? Would you consider the possibility of an "Enforcement Partnership" with NAAG?

Answer 3. The joint National Association of Attorneys General (NAAG)/Justice Department Antitrust Division announcement of the exploration of an enforcement partnership is a commendable step toward assessing possible cooperative efforts in a time of scarce resources. While I do not know the specifics of the proposed enforcement partnership, if confirmed I hope to meet as soon as possible with NAAG representatives regarding Commission enforcement activities, including consumer protection, where coordination of enforcement efforts saves everyone's limited resources.

The proper working relationship between the FTC and the State Attorneys General would be one that respects the principles of federalism, economizes on resources, and produces the best set of federal and state programs of enforcement in the public interest. To me that implies constant cooperation and exchange of appropriate information.

Question 4. I have asked the Commission for information about recent retail gasoline price increases, an issue of particular concern to my constituents in Nevada. The Commission's response indicated that the increases were consistent with underlying market trends, that the oil companies did not use the Exxon tanker accident as a pretext for raising prices, and that the industry structure does not appear to have been a substantial contributor to the price rise. Do you have an opinion on the priority of this issue among the FTC's responsibilities, and the adequacy of the Commission's efforts to investigate this issue?

Answers of Janet D. Steiger to Post-Hearing Questions of Sen. Bryan

Answer 4. Retail gasoline prices are of great concern to many consumers and a significant factor in the calculation of the CPI. I understand that its long involvement in various oil industry issues has given the Commission recognized expertise in the field. The precise priority the issue should have may well depend on trends in the industry (including not just their direction but the rapidity and magnitude of change) and so could receive more attention and higher priority at one time than at another. It would seem proper, however, for the Commission to keep itself continuously informed and have a coherent rationale for the degree of priority it gives the issue at any particular time. Thus, while I cannot judge the correctness of the FTC response in this particular case, an accompanying analysis of the reasons for its conclusions would have been instructive, and I understand that an effort to provide such an analysis is now being undertaken.

Question 5. The FTC obviously has responsibilities involving the monitoring of advertising and marketing practices. Surgeon General Koop has raised concerns about advertising of tobacco and alcohol products, particularly those aimed at people under 21 years old. Regulation of advertising of these products traditionally has been quite controversial. Do you believe the FTC has a role in investigating such issues? If so, what priority should be given to such issues?

Answer 5. Allegations that tobacco and alcohol products are being marketed to young people are matters of serious concern that deserve priority attention. I would want the Commission staff to review them promptly to determine whether Commission action is appropriate. Moreover, I would expect that the staff not only react to public allegations but also actively monitor such advertising from the standpoint of fairness and deceptiveness standards.

Question 6. The American Bar Association's recent study of the role of the FTC (The "Kirkpatrick Commission") recommended consideration of sunset provisions for FTC orders, stating that firm-specific orders "should last only as long as necessary to prevent the likely resumption of the illegal practices." The Kirkpatrick Commission concluded that, except in unusual cases, such a period is unlikely to exceed 10 years. Others argue that sunset provisions may prematurely conclude the deterrent effect of FTC orders on firms not directly involved in the orders, or may improperly limit the FTC's ability to enforce its orders with respect to the firms to which the orders apply. What is your view of the use of sunset provisions in FTC administrative orders?

Answer 6. I am aware of the general arguments for and against sunset provisions and of the Kirkpatrick Committee's recommendation that the FTC consider them. Certainly, obsolete orders that remain on the books simply because no one any longer cares about the issue serve no good purpose, nor do those that needlessly (from the standpoint of preventing the violation at which the order was aimed) hamper a broader range of economic activity. I suspect one problem might be the review process for Commission orders. I would want to examine all available options before deciding finally about the proper application of sunset provisions.

Answers of Janet D. Steiger
to
Post-Hearing Questions of Senator Gorton

Question 1. Do you believe the FTC has a responsibility to identify and take action against "false and deceptive" advertising? If so, how much emphasis will you place on this role if you are confirmed?

Answer 1. Since the FTC Act states that dissemination of false advertising is unlawful and empowers the Commission to act against it, I believe the FTC clearly has a responsibility to do so. This role should be given high priority, particularly in areas where significant harm to consumers is most likely. Advertising is a major source of information for consumption decisions, and the competitive market -- from which the consumer benefits -- works best when consumers have complete and truthful information on which to decide. As the FTC has recognized, enforcement in this area must be done in a manner that does not unduly discourage the provision of truthful information.

Question 2. Presently, the agency prefers a case-by-case approach. In the area of advertising, what is your view on a broader approach through the publication of "guidelines or rules"?

Answer 2. I recognize that the case-by-case approach could have advantages in the advertising area because the issues may be specific to one advertisement. In general I agree with the conclusion of the Kirkpatrick Report that, while often perceived as unduly cumbersome and costly, and best used after careful consideration of other available remedies and as a particular response to a widespread practice, rulemaking may indeed find appropriate targets. I also believe that clearly stated guidelines can be a valuable tool in fostering voluntary compliance, and assisting both the public and the advertising industry. The FTC is prevented from initiating rulemakings to restrict advertising on the grounds that it is unfair. I reserve judgment on whether this restriction should be continued until I have had an opportunity to judge its practical impact on the Commission's enforcement mission.

Question 3. Will you take action to encourage the states to become more involved in this area?

Answer 3. I agree with the Kirkpatrick Report that the FTC should take the primary role in advertising of a national character. However, the states have a crucial role to play in consumer Answers of protection. The State Attorneys General are in close touch with local problems and are an invaluable source of early identification of fraudulent activity. The Justice Department/National Association of Attorneys General recent initiative to form an executive working group for antitrust enforcement is to be commended, and if confirmed, I would confer with the States on similar cooperative efforts in consumer protection. I would also want to give careful attention to the Kirkpatrick Report's suggestions for sharing FTC economic expertise where appropriate, and assisting the states in information exchange with other federal agencies, and performing model evaluations of substantiation evidence and consumer surveys.

Question 4. In the health area, "caveat emptor" has serious consequences, perhaps even life-threatening. Do you think the FTC has more or less responsibility to regulate this area as opposed to other areas of advertising?

Answer 4. The FTC, I believe, has heaviest responsibilities in the areas most likely to cause substantial consumer harm. Given that most consumers do not have the special expertise necessary to evaluate many health related claims, this is a critically important area for the Commission's scrutiny. I would note that the extent of possible harm, and the inability of consumers to assess health advertising have been factors in requiring higher levels of substantiation for such advertising.

Question 5. When an ad says a physician is "board certified", should it state the specialty so that the public is aware of the area the physician is certified in?

Answer 5. The first principle in this area is that the determination of qualifications and competence of professionals has long been, and remains, in the purview of the states. That is a medical question and not an area in which the FTC should substitute its judgment. The second principle is that free competition based on informed choices by the consumer must be preserved. That is the FTC's responsibility. The problem arises because the technical judgment of what constitutes a medical specialty, and how competence in it may be demonstrated, also have meaning for consumers. If the term "board certified" by itself were genuinely sufficient to inform consumers, so that they could make rational choices among physicians, then to the extent its use allows more competition it could be beneficial. As a general matter, I believe that, all other things being equal, providing the consumer with a higher level of accurate information helps the market function better. Thus, stating a specialty may well be useful to the consumer. I would want to know the potential relevance of board certification to the treatment offered and the impact of the advertisement on the consumer. The opinion of the medical community on the significance of medical specialty designations and the likelihood of harm from their absence should also be studied before arriving at a definitive judgment.

State Capitol, 114 East
Madison, Wisconsin 53702
608/266-1221

Mark E. Musolf
Deputy Attorney General

DONALD J. HANAWAY
Attorney General of Wisconsin

July 31, 1989

The Honorable Ernest Hollings
Chair
Committee on Commerce, Science and Transportation
United States Senate
Washington, D.C. 20510

The Honorable Richard Bryan
Chair
Subcommittee on Consumers
United States Senate
Washington, D.C. 20510

Dear Senators Hollings and Bryan:

I am writing in support of President Bush's nomination of Janet Steiger as chair of the Federal Trade Commission. I believe her experience will strengthen the Commission and the role it plays in consumer protection.

As you know, the FTC's reluctance to act on a number of consumer matters has created a regulatory vacuum that state Attorneys General have sought to fill over the last few years. Most Attorneys General would like to see a more active FTC and greater coordination and cooperation with the states. At the Summer meeting of the National Association of Attorneys General, we approved a resolution calling for the development of an "enforcement partnership" between the Attorneys General and the FTC that would maximize the effectiveness of enforcement resources.

Janet Steiger has the experience and savvy to build that federal state partnership. Her tenure on both the national Commission on Veterans Education Policy and the Postal Rate Commission give her the know how to work in the federal government while still being sensitive to citizens' needs.

The Honorable Ernest Hollings
The Honorable Richard Bryan
Page Two

On a more personal note, I can assure you that Janet Steiger is highly regarded here in the State of Wisconsin. She and her late husband, Representative William Steiger, have both provided many years of unselfish and dedicated service to the people of Wisconsin and the entire country.

I therefore urge your support of Janet Steiger's nomination as chair of the FTC, and I look forward to working with her to develop a strong state-federal consumer protection partnership.

Sincerely,

Donald J. Hanaway
Attorney General
of Wisconsin

DJH:bwm

cc: The Honorable Janet Steiger
The Honorable Robert W. Kasten, Jr.
The Honorable Herbert Kohl
Wisconsin House Delegation

BOB KASTENMEIER
2D DISTRICT, WISCONSIN

2328 HOUSE OFFICE BUILDING
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Congreſs of the United States
House of Representatives
Washington, DC 20515

COMMITTEE ON
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CONSTITUTIONAL RIGHTS

PERMANENT SELECT
COMMITTEE ON INTELLIGENCE

SUBCOMMITTEE ON
LEGISLATION

SUBCOMMITTEE ON PROGRAM
AND BUDGET AUTHORIZATION

July 25, 1989

The Honorable Ernest F. Hollings
Chairman
Senate Committee on Commerce, Science
and Transportation
Senate Russell 254
Washington, D.C. 20510

Dear Mr. Chairman:

As Dean of the Wisconsin Delegation in Congress, I write as one who has known Janet Dempsey Steiger for a quarter of a century.

I believe that she is an excellent choice to be Chairman of the Federal Trade Commission.

Janet Steiger is exceptionally able -- Phi Beta Kappa and a Fulbright Scholar, among other achievements -- and has a long record of conscientious public service.

For the past decade she has served with distinction as Chairman of the Postal Rate Commission. A few years ago, the large professional organization, The Federally Employed Women of Washington, chose her for The Outstanding Woman in Government Award for 1984.

I am very pleased to support this nominee, and I know that you will find her a pleasure to work with at the Federal Trade Commission.

With kind regards,

Sincerely,

Bob Kastenmeier

ROBERT W. KASTENMEIER
Member of Congress

RWK:ad

Senator BRYAN. The next nominee we are considering for the Federal Trade Commission is Ms. Deborah Owen. We are pleased to have you with us today, and I understand that you have some members of your family here. If you would care to do so, let me extend to you an invitation to introduce them and let them be acknowledged by members of the Subcommittee.

I see that our colleague, Senator Thurmond, has joined us to introduce you to the Committee.

Senator Thurmond.

STATEMENT OF HON. STROM THURMOND, U.S. SENATOR FROM SOUTH CAROLINA

Senator THURMOND. Mr. Chairman and members of the committee, it is a pleasure for me to introduce Ms. Deborah K. Owen to this committee. I would like for her to stand right now and let you see her.

Ms. Owen has been nominated by President Bush to serve as a member of the Federal Trade Commission. Ms. Owen began her public service as minority counsel for the House Committee on the Judiciary where she served from 1980 to 1982.

Subsequently, Ms. Owen came to work as general counsel of the Senate Judiciary Committee when I was chairman. She is not from my state, but I was trying to find the best qualified person, and I selected her over a number of applicants.

An able and competent attorney, she served with distinction until 1985. After leaving the committee, Ms. Owen served for two years as associate counsel to former President Reagan.

Currently, Ms. Owen is managing partner in the Washington office of the McNair law firm, headed by Governor Robert McNair, the distinguished former governor of South Carolina. Ms. Owen is an honor graduate of the University of Maryland. She was a Marshall scholar in political philosophy at the University of Edinburgh in Scotland, and she received her juris doctor degree from the Harvard Law School. She is well educated.

Prior to her government service, Ms. Owen was an attorney at Piper and Marbury in Baltimore. I just want to say she has had experience in practicing, and she has had experience in government.

In closing, Mr. Chairman, let me say that Ms. Owen is an industrious, dedicated, and intelligent attorney who will be a fine addition to the Federal Trade Commission. She possesses the necessary qualifications for success as a commissioner.

I would urge my colleagues on the committee to support her nomination, as I feel that she will live true to the trust imposed in her and be a fine addition to the Federal Trade Commission.

Senator BRYAN. Thank you very much, Senator Thurmond.

Thank you for joining us.

Senator THURMOND. Thank you. I wish to thank you and the members very much for hearing me.

[The biographical sketch and questions and answers follow:]

ERNEST F HOLLINGS SOUTH CAROLINA CHAIRMAN

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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Owen (Last) Deborah (First) Kaye (Other)

Address: 6106 Minute Hand Court (Current residence) 1155 15th Street, N.W., #400 (Business)
Columbia, Maryland 21044 Washington, D.C. 20005

2. Position to which nominated: Commissioner, Federal Trade Commission
Date of nomination: June 6, 1989

3. Date of birth: July (month) 21, (day) 1951 (year)
Place of birth: Washington, D.C.

4. Marital status: Single
Full name of Spouse:

5. Names and ages of children: None

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Towson State University	4/87-5/87	(non-credit computer courses)	
Harvard Law School	9/74-6/77	J.D.	6/77
University of Edinburgh	10/72-6/74	(declined to complete degree to enter law school)	
University of Maryland	9/68-6/72	B.A.	6/3/72
Bladensburg Sr. High School	9/65-6/68	diploma	6/68

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of Employer	Address	Type of Work
3/86	pres.	McNair Law Firm, P.A.	1155 15th St.,N.W. Washington, D.C. 20005	Managing Shareholder, Wash., D.C. office, Member, Board of Governors (1/88-present); Shareholder (4/87-present); associate (3/86-3/87)
6/85	3/86	White House Counsel's Office	110 Old Executive Office Bldg. Washington, D.C. 20500	Associate Counsel to the President
1/83	5/85	U.S. Senate Committee on the Judiciary	224 Dirksen Senate Office Bldg. Washington, D.C. 20510	General Counsel
1/80	12/82	U.S. House of Representatives Committee on the Judiciary	111 Cannon House House Office Bldg. Washington, D.C. 20515	Associate (Minority) Counsel
9/77	12/79	Piper & Marbury	36 South Charles St. Baltimore, MD 21201	Associate
6/76	8/76	Piper & Marbury	25 South Charles St. Baltimore, MD 21201	Summer law clerk
6/75	8/75	Dukes & Troese	2101 Brightseat Rd. Hyattsville, MD 20785	Summer law clerk
6/74	8/74	Rep. Lawrence J. Hogan	1208 Longworth House Office Bldg. Washington, D.C. 20515	Summer intern

8. Government experience — List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

A. Employment with the White House, the House of Representatives, and Senate, described more fully in response to Question 7 above.

B. Secretary, substitute teacher, and adult education French teacher employed part-time and during the summers by the Prince George's County Board of Education (1968-1972).

C. Lobbying activities during employment with the McNair Law Firm, P.A.

9. Political affiliations, activities: — List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

A. Member, Republican Party (1972-present)

B. Assistant Treasurer, Americans for Good Government (political committee on which Senator Thurmond served as Honorary Chairman) (2/88-4/88)

C. Assisted Treasurer, Americans for Good Government (1986-1988)

D. Member, Steering Committee, Allie Milder for Congress (1987-1988)

E. During employment in the House and Senate, I performed miscellaneous volunteer services for various members of the House and Senate Judiciary Committees who were up for re-election, on personal time.

F. In 1983 and 1984, I spoke on the subject of Federal crime legislation at Republican Women's Leadership Forums, sponsored by the Republican National Committee, in Indianapolis, San Diego, Philadelphia, and Miami.

G. I have made the following political contributions:

3/8/89	Thurmond for Senate	$1000
6/88	Moorhead for Congress Committee	$500

6/88	Friends of Ham Fish, Jr.	$500
5/88	Floyd Spence for Congress	$100
3/2/87	Bob Michel for Congress	$500
10/31/86	Judge Robert P. Griffin	$75
10/23/86	Kindness for Senate	$500
7/23/86	Kindness for Senate	$500
6/24/86	Friends of Ham Fish, Jr.	$500
6/3/86	Arlen Specter for U.S. Senate	$250

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

A. Member, American Bar Association (Antitrust and Economics of Law Sections)

B. Member, American Rose Society

C. Member, Western Pennsylvania Conservancy

D. Member, Winterthur Guild

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

A. Maryland Senatorial Scholarship (1968-1972)

B. Phi Beta Kappa (1971)

C. Phi Kappa Phi (1972)

D. University of Maryland (Arts and Sciences Chapter) Alumni Award for Collegiate Accomplishments in Scholarship, Leadership and Citizenship (1972)

E. James Douglass Goddard Memorial Medal (Awarded to Native Resident of Prince George's County for Scholastic Achievements and Scholarly Attributes) (1972)

F. Alpha Lambda Delta Award to Graduating Senior with Highest Grade Point Average (1972)

G. Marshall Scholarship (1972-1974)

H. Federal Probation Officers' Association President's Award (1984)

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

None.

PREHEARING QUESTIONS OF THE MAJORITY AND THE ANSWERS OF MS. OWEN

1. What do you perceive to be the major role or mission of the Federal Trade Commission? Is there another entity, public or private, that may be better suited to performing this role or mission?

The primary role of the Federal Trade Commission is to protect competition and consumers by enforcing its governing statutes. Traditionally, with respect to matters "in or affecting commerce," this role has had two major foci: (1) antitrust enforcement, and (2) unfair or deceptive practices.

While other agencies and groups have legitimate roles to play, no other entity is better suited to this mission than the Federal Trade Commission. Its antitrust and consumer protection functions are complementary, thus giving it a unique perspective and advantage that no other national entity enjoys. Other entities, such as the Department of Justice and the state attorneys general, bring certain additional tools to bear, such as criminal enforcement and expertise as to local conditions; thus enhancing the Commission's role and underscoring the need for considered coordination.

2. What areas of present FTC activity do you believe should be given the highest priority? Please specify the reasons for your choice.

Due to the responsibilities imposed under the Hart-Scott-Rodino Improvements Act, in the antitrust area, merger enforcement must necessarily receive the highest priority. Moreover, many have urged the importance of presenting a visible response to public concern over the recent trend toward numerous and large mergers. Further, the implications of merger enforcement vis-a-vis the international competitiveness of American business must be a vital consideration. As a related matter, serious attention must be focused on enforcement efforts against parties who attempt to evade the requirements of the Hart-Scott-Rodino Act.

In the area of consumer protection, the primary focus must necessarily be on cases of egregious fraud, particularly those that transcend state boundaries, such as telemarketing fraud. Continuing to refine clear standards to govern deceptive advertising is crucial, in order to provide business with some predictability and enhanced ability to comply with the dictates of law.

3. In light of budgetary constraints, are there particular FTC activities that you believe should be redirected or discontinued? Please specify.

The higher priorities on resources are the areas outlined in response to Question 2 above. I would be loathe to recommend any discontinuation of existing activities in the absence of an in-depth study of the agency's functions and budget, including lengthy consultation with the agency's budget staff. Generically, I would recommend redirecting resources from whatever activities there may be, if any, that are not clearly founded in the agency's statutory mandate.

4. Are there any areas in which you think the FTC Act should be amended in order to enhance the FTC's ability to enforce its mandate? If so, what are those areas and what changes do you recommend. Are there any areas that should be cut back, transferred, or redefined through legislation? What about other statutes administered or enforced by the FTC?

Because of the considerable controversy surrounding various rulemaking efforts of the FTC, this process may be worthy of additional study in search of improvements or alternatives. For instance, in recent efforts to enact reauthorization legislation for the Commission, there appears to be a general consensus in favor of adopting the "prevalance" requirement for rulemaking, based on current Commission standards. Efforts to clarify standards go far toward providing certainty in the law needed for the conduct of business; these must be evaluated on a case-by-case basis to determine whether legislative action is needed, or whether Commission guidance would be sufficient.

5. Critics have sometimes asserted that there is no need for two antitrust agencies -- the Federal Trade Commission and the Justice Department. What is your view?

The Commission and the Department, respectively, have developed special expertise which enhances the total national antitrust enforcement mission. The Department takes the lead in criminal enforcement; the FTC has special economic expertise developed in connection with its consumer protection and educational functions. Their structures also bring different benefits in various types of cases: the FTC depends on consensus as a basis for action. The Justice Department has a more pyramidical decision-making authority.

Ultimately, however, as recent ABA reports have also concluded, we are not writing on a clean slate; since the status quo seems to work quite well, particularly under the liaison procedures established between the two bodies, there does not appear to be any compelling reason for change at this point. Rather, the focus should be on improving the performance of each agency within its respective purview, and their coordination with one another, the states, and international law enforcement authorities.

6. What areas of the FTC's antitrust enforcement authority would you emphasize and which would you deemphasize? Why? In your answer, please specifically address enforcement in the areas of: (a) conglomerate and vertical mergers; (b) vertical non-price restriction; (c) resale price maintenance; (d) predatory pricing; and (e) price discrimination.

In light of the resource constraints that the FTC is currently experiencing, as a general principle, enforcement should be concentrated where the best cases can be brought, in terms of the evidence available and the likelihood of success in the courts; and where the potential injury in the absence of an enforcement action is the greatest. This would apply equally to mergers, vertical restrictions, monopolization, and price discrimination.

Within these parameters, as previously indicated, horizontal merger enforcement should take the highest priority in light of the potential for anticompetitive results, and the perceived need for demonstrative action to allay wide-spread public concern. Potential injury is frequently more difficult to prove in cases of conglomerate and vertical mergers; nevertheless, where appropriate cases are identified, such as mergers used as a vehicle for other anticompetitive activity or to frustrate new entry into a particular market, action may be warranted.

In the area of vertical restraints, the recent recommendation by an American Bar Association Task Force advocating repeal of the Department of Justice Vertical Restraints Guidelines provides an opportunity for reinvigorating debate and reevaluating the proper role of the federal government in this area. Many vertical non-price restrictions are now governed under the rule of reason, making cases more complex and costly to pursue. However, where such restrictions are appropriately subject to challenge, they ought to be brought. Under the Supreme Court decision in the Dr. Miles case, resale price maintenance is per se illegal, and the general consensus seems to be that that should continue to be the case; accordingly, cases should be brought where the burden of proof can be met, particularly where the activity facilitates horizontal collusion.

Predatory pricing cases are frequently viewed as being complicated by proof problems, definitions of "cost," and the attitude of the courts as expressed in the Matsushita case. Nonetheless, such allegations should be investigated and pursued where appropriate, particularly where there is evidence of an attempt to monopolize. Finally, with respect to price discrimination, appropriate cases should be brought; but, the goal should be to avoid "chilling" legitimate competitive efforts. In particular, recent trends in private litigation in this area might provide some insight into how resources can be used most effectively.

7. What statutory changes would you suggest, if any, in the FTC's authority to regulate advertising?

The area of advertising presents a significant challenge in the attempt to balance the need for maximizing availability of useful information to consumers, on one hand, and preventing the dissemination of deceptive claims, on the other. The Commission's effort to articulate a definition of deception, and various attempts to define unfair acts and practices (including Section 9 of S. 1249), recognize the goal of providing greater certainty in the law. However, without further study, I would not propose any specific changes on the part of the Commission or Congress.

8. Do you believe the FTC's program in the area of advertising substantiation has been effective? What changes, if any, do you believe should be made in such a program?

The advertising substantiation doctrine addresses the question of whether there is a "reasonable basis" for an advertising claim. Requiring unreasonable amounts of substantiation could discourage advertisers from providing possibly useful information to consumers. The articulation of the FTC's standards in its Advertising Substantiation Statement appears to be generally regarded as a helpful step in alerting business as to how to comply with the law. The Commission should continue to refine the law in this area to ensure maximum guidance and predictability, and to balance the various costs involved to society in requiring more or less substantiation.

9. Do you have any views as to whether or how corrective advertising might be used effectively in cases where false and misleading advertisements have been presented to the public?

Any sort of affirmative relief raises the question of achieving a suitable balance between avoiding too much government direction and trying to sculpt the most appropriate redress for victims. This approach might be best evaluated on a case-by-case basis, and, for my own part, would necessitate considerable additional study.

10. Should FTC rules be subject to systematic congressional review? What specific form should such a review take?

Systematic review of rules, both by the Congress and by the FTC itself, is a useful tool to ensure the timeliness of such rules, to minimize unnecessary burdens, and to accommodate changing circumstances. The precise form that congressional review should take is the prerogative of the Congress, within the confines of constitutional restrictions. Any such procedure hopefully would aim toward minimizing unnecessary delay and other burdens on the agency in its effort to protect consumers and competition.

11. Section 3 of S. 1249, the FTC Act Amendments of 1989, makes permanent now temporary restrictions on the Commission's authority to study or investigate an agricultural marketing order or certain conduct of an agricultural cooperative. In addition, Section 3 requires the Commission to notify and consult with the Secretary of Agriculture before issuing an antitrust complaint against an agricultural cooperative. What is your opinion of these restrictions?

The Capper-Volstead Act and the Clayton Act currently provide certain federal antitrust exemptions for agricultural cooperatives. This is a complex area of the law, and it would be difficult to ascertain from outside the Commission, and without considerable in-depth study, what problems, if any, such restrictions might pose for the Commission or competition. However, should Congress choose to make them permanent, strict adherence by the Commission would be essential. Finally, consultation, whether voluntary or mandated, can generate helpful input, but care should be taken to ensure no undue delay in any authorized enforcement matter.

12. Would you support repeal or modification of the McCarran-Ferguson Act so as to allow the Federal Trade Commission and other federal agencies to regulate the business of insurance?

Under current law, the "business of insurance" is exempted from the federal antitrust laws, except in cases of boycotts, coercion, or intimidation. Otherwise, regulation and enforcement are left to the states. Proposals to repeal the McCarran-Ferguson Act have been pending in the Congress for many years, and the proposals vary considerably in their approach. Any such change should be conceived in the Congress, and should come only after extensive study and consultation with various affected parties. In the meantime, the Commission should continue to adhere to the current law, and can provide appropriate information where authorized and requested.

13. What is your view of the importance of the Robinson-Patman Act, and the FTC's role in enforcing that Act?

Pursuant to liaison procedures established between the Department of Justice and the Federal Trade Commission, enforcement of the Robinson-Patman Act is left to the Commission. The Act has been viewed as an important tool for the protection of small business, and should be used in appropriate cases. However, the burgeoning complexity of these cases may make them difficult to bring at a time of declining resources. A review of private litigation in this area should guide the Commission in its efforts to appropriately allocate resources for this responsibility.

14. What suggestions, if any, do you have for improvements in the way the Federal Trade Commission combats consumer fraud?

In light of diminishing resources, one of the areas worthy of consideration is increased cooperation with the states, particularly with respect to intrastate and regional investigations. Various alternatives in this regard have been suggested, including "cross-deputizing," memoranda of understanding, and assorted mechanisms for sharing information. We might also look to other kinds of law enforcement to see if any methods of cooperation currently in place are adaptable to these cases. Any proposal needs to be closely examined with an eye toward tailoring appropriate means to specific problems.

STATEMENT OF DEBORAH K. OWEN

Ms. Owen. I appreciate that very much, Mr. Chairman. I have two members of my family here today. I have my mother, Beverly West, who is a secretary at the high school where I went to high school in Bladensburg, Maryland, and I have my brother, Robert West, who works for a dry cleaning company in Prince George's County. I appreciate the opportunity to introduce them to the Committee.

Senator Ford. He could make a killing here if he is any good.

Senator Stevens. Mr. Chairman, would you yield right there? My apologies to Miss Owen, but I have another appointment.

I just wanted to say, I am happy to see her here and I remember very well the day she was here with the Judiciary Committee, working so well with Senator Thurmond. But I must leave. I have another appointment at 8:30.

Ms. Owen. Thank you, senator. I appreciated the opportunity to speak with you in your office a couple of weeks ago.

Good morning, Mr. Chairman. I do not have a formal written statement to present to the Committee this morning, but I would like to make a few introductory remarks briefly, if I might, with the Chair's permission.

Senator Bryan. Please proceed.

Ms. Owen. Mr. Chairman, I am very honored to be a nominee to a position on the Federal Trade Commission at what I consider to be a very crucial time in its history.

As you are no doubt aware, we are ready to celebrate the 75th Anniversary of the Commission. We are completing roughly a century of Federal antitrust law in this country, and it seems to me we are poised before an opportunity to build on the accomplishments at the Commission in the last two decades. We have an opportunity to reexamine priorities, to debate these and to make appropriate improvements in consultation with the Congress.

In terms of my own perspective, Mr. Chairman, I come from a government career that is primarily focused on issues of law enforcement. Accordingly, if I were fortunate enough to be confirmed, I would go to the Commission with a full intention of participating in vigorous enforcement of the laws within the Commission's jurisdiction.

At the same time, from the perspective of being a private practitioner and a business person myself, I am attuned to the need to minimize undue government intrusion and burdens on legitimate business activities. Furthermore, I sincerely believe that a primary concern of the Commission at this point must be realistically addressing the role of American business in an ever-increasingly global market.

During the months leading up to this hearing, I have had the opportunity to meet many individuals who currently serve, or who have in the past served at the Commission in a variety of positions and at various levels of the organizational chart.

I am overwhelmed at the dedication and devotion of these people and their intense loyalty to this institution and its mandate. If confirmed, I will consider it a great honor to join this impressive league of people and would undertake my responsibilities with great humility.

I look forward also to the opportunity in this position, which would afford me an ability to continue to coordinate and cooperate with other very impressive groups, including, of course, this Committee and the Congress, where I have spent many years, the Department of Justice, State, local and international law enforcement agencies, and of course the various groups that are impacted by the Commission's decisions. I also look very much forward to serving under the leadership of our impressive new Chairman, if we are confirmed.

I would like to close, Mr. Chairman, by thanking several people who have helped me get to this point. For one, President Bush for his inspiring confidence in me, and the White House staff for their help along the way. I would like to thank you very much for being so generous with your time during this process, and very much also to the staff of this Committee who have made what is necessarily a somewhat difficult process a little easier, with their courtesy and all their invaluable assistance throughout.

I would like to thank Senator Thurmond for being a special friend and mentor and for coming this morning, and finally, of course, family and friends, many of whom were kind enough, like the gentlemen here on the Committee and the staff, to come so early this morning. They obviously have given me considerable love and confidence throughout my career.

With those introductory remarks, Mr. Chairman, I am pleased to answer any questions that the Committee might have for me.

Senator **BRYAN**. Thank you very much, Miss Owen. You have had the opportunity, in your career, to serve as a staff member here on Capital Hill and I think you know, from our perspective how important, it is that we have lines of communication between the Commission and in particular this Subcommittee, which has FTC oversight jurisdiction and responsibility. I would hope that you would be mindful of the importance of those channels of communication.

Ms. **OWEN**. Well, Senator, I plan to be very mindful of those channels, and I expect you may be hearing from me more often than perhaps you would want to.

Senator **BRYAN**. We will certainly invite that communication. Could you share with us your philosophy in terms of the role and responsibility of this agency in the marketplace?

Ms. **OWEN**. Well, as I indicated in my introductory remarks, it is an interesting balance that the Commission is required to achieve in the course of enforcing its statutory mandate.

On the one hand, we do want to have vigorous enforcement of our antitrust laws and consumer protection laws. On the other hand, I think there is an acknowledged need to minimize any unnecessary burdens that there might be on legitimate competition and other kinds of legitimate business activities, such as advertising.

I come more from a perspective, as you know, of being an antitrust lawyer and I have watched in the course of being a practitioner and also working on the Hill on some of these issues, the difficulty of drawing that line from time to time.

But I would like to feel, if there is a contribution that I might be able to make over there, I would like for people to feel that they have a vigorous law enforcement agency there that is going to act when it is appropriate and keep anticompetitive activities in check.

Senator **Bryan**. I am interested in your thoughts in terms of the working relationship with the state attorneys-general. There are many that feel that the relationship has been sadly lacking and in need of much improvement. There are others who would argue that, because the relationship has been so poor, there has been a void created in which the state attorneys-general have moved into areas which are really properly the responsibility of the FTC. It seems there is the potential, at least, for a good bit of conflict in terms of the working relationship between the FTC and the states attorneys-general. Do you have thoughts on this issue?

Ms. **Owen**. Yes, sir, I do. There is necessarily a conflict in this area. Our system of federalism poses that and places it in our laps to resolve. We used to encounter, when I was working on law enforcement issues with the Senator Judiciary Committee and the House Judiciary Committee, we used to encounter this tension from time to time in the criminal law enforcement area.

There are a variety of methods that law enforcement people have used to resolve some of these conflicts. As I indicated to you when we met in your office, it seems to me it is appropriate to evaluate these various mechanisms on a case-by-case basis. What might be an appropriate help in an antitrust case would not necessarily be helpful in a particular advertising case, let us say.

One comment that I would make in this area is, you may be aware that my own State of Maryland has been very active in terms of the role that the state attorney-general's office has played on various antitrust issues and some of the consumer issues.

I have had the occasion to chat more than once with the gentleman who is head of the antitrust section there and we have made some tentative plans to continue those discussions in the hope that we might be able to participate in this effort to restore, or improve, some of the working relationships between the Commission and the states. I think it is absolutely imperative to do so.

Senator **Bryan**. Recently, as you know, a task force of the American Bar Association indicated that the working relationship between the antitrust division of the Justice Department and the FTC needed to be strengthened.

Do you have any thoughts in terms of what that relationship ought to be, and if you agree, how it ought to be strengthened?

Ms. **Owen**. Well, the Department of Justice and the Federal Trade Commission really—at least in the antitrust area—share very much the same mission, and it seems to me it is important for there to be a coordinated effort between the two of them in order that business entities that are subject to their jurisdiction have some predictability in terms of complying with the Federal dictates in this area.

I have had occasion to speak with Mr. Rill, who is the new assistant attorney-general for the antitrust division and I have been very much impressed at his commitment to improving and continuing coordination and cooperation with the Federal Trade Commission. I have pledged to him that, if I am confirmed, I will do whatever I can to facilitate this goal. I think it is very important.

Senator BRYAN. Finally, my last question is, as a practitioner, there may be some areas in which the potential exists for a conflict as to a matter which you handled previous to your confirmation as a member of the Commission. I would ask that you be sensitive to that potential and where appropriate recuse yourself.

Have you worked that out in your own mind, in terms of what will be your standard and what the criteria is going to be?

Ms. OWEN. Yes, sir, I have. In the course of my position in the White House Counsel's Office, I was involved very much in some of the ethical considerations facing Federal nominees, Based on that experience, I have had some lengthy discussions with both the Office of Government Ethics and the designated ethics officer at the Federal Trade Commission in connection with just the sorts of problems that you have identified.

I am in a situation where I will be severing my relationship with my law firm and all of my clients and I do not have any financial investments that would pose any conflict, So for me, really, it would be more in the area of the appearance of conflict in terms of people that I have worked for in the past. As I say, I have discussed this at length with the ethics officer there and we have sort of promised one another that we will consult on a regular basis as each matter comes up, in an effort to be very scrupulous about these problems.

Senator BRYAN. Well I am sure you would be. Let me just specifically ask a question in terms of how you handle a particular situation. Assume this confirmation is going to proceed, as Senator Kasten has expressed a hope that it will, in an expeditious manner and that you are confirmed. That there is an appearance by a member of your former firm before the Federal Trade Commission—let us give some time frame, say, in the next 60 days. Would you recuse yourself under those circumstances?

Ms. OWEN. Under the discussions that I have had with the ethics officer at the Federal Trade Commission and pursuant to the letter that he has written to the Committee, I am planning to recuse myself at a minimum for one year from any matter in which my firm would be representing a client.

Senator BRYAN. I think that is an excellent idea and I commend you.

Ms. OWEN. And, on a case-by-case basis, after that where it feels appropriate.

Senator BRYAN. Thank you very much. Senator Ford?

Senator FORD. How many employees do you have at the Federal Trade Commission? Have you checked that out?

Ms. OWEN. I think roughly about 947.

Senator FORD. How many of those are lawyers? 946?

Ms. OWEN. Senator, I do not know the answer to that question.

Senator FORD. It is pretty close though, is it not?

Ms. OWEN. They have a fair number over there. It is in the hundreds, I believe.

Senator FORD. Yes. Some of the business people around never worried much about the Federal Trade Commission and their legal ability until we started graduating so many lawyers, and now they are concerned about the Federal Trade Commission. They are beginning to get a few good lawyers and so it bothers them some.

You skirted around—you are a pretty good word merchant and, you know, we have talked before and I enjoyed our little chat, but you worked your way around the McCarran-Ferguson Act pretty well in your answers that you gave to the Committee. Can you be a little more specific as to how you feel about the repeal of the McCarran-Ferguson Act?

Ms. **Owen**. Senator, I would have to say that I do not come to this hearing with a very firm position either way. This is an area—I know several people have commented that antitrust practitioners have a general knee-jerk reaction against exemptions from the antitrust law, but leaving that aside, it seems to me this is a very complicated matter because there are some small business concerns involved. There is a history of this exemption.

I know that in both the House and the Senate there have been variety of proposals that have been made. I am unfortunately not an expert in the particulars of those various proposals—on the costs and the benefits that they might pose to the public interest and to the insurance industry itself.

All I could say to you would be that I would, if the issue came up before us, that I would want to study it very, very thoroughly before I recommended to anyone what would be a rather fundamental change in longstanding antitrust laws. The bottom line for me in an area like this is, it seems to me this is a statutory change, and a change like that really is the prerogative of the Congress.

Senator **Ford**. Well, I understand the prerogative, but we need advice and counsel from those of you who have positions of authority and you are being nominated here today because of your background and having worked on the Hill and having worked on the Judiciary Committee and having worked for a congressman and having been in a law firm that is very active in this community—and a very fine one, I might add.

It appears that there ought to have been some generation of thought as it related to this particular area and you mentioned particularly on the Robinson-Patman Act that limited resources are probably going to prevent you from getting involved in more and more of that arena.

Does that also apply to other aspects that might come before the Commission, that the reduction of budget means that you are not going to be able to carry out the mandate of the law, or is it going to be strung out?

Ms. **Owen**. Well, it is a question of prioritizing, Senator, and as I indicated in my answers, that being the case it seems to me that rather than saying well, you know, this is more important, this particular area is more important than another area, I would like to see the Commission focus on the best cases that we can find in any of the areas that are under the Commission's mandate. So many times there are problems with proof and things like that, where——

Senator **Ford**. Well, define the best case. You know, you search for the best cases. Is that one you can win?

Ms. **Owen**. Yes, sir.

Senator FORD. If you think you can win this one and one that you have some doubt about winning and yet it has some interest, that would be put on the back burner and one that you would have an opportunity to win——

Ms. OWEN. If it were an either-or situation, I guess I am enough of a lawyer I would choose the case where I thought I could win—the clearest case.

Senator FORD. You would be a plaintiff or a defense lawyer in that case, and the fees would be somewhat different. Here, we are paying you taxpayer's dollars to look at various and sundry cases and some of those cases may not, on the surface, look like a winnable one, but it does have some ingredient in it that would cause you some concern and so when you find that concern, I would hope you would pursue that even though on the surface it does not look winnable.

Ms. OWEN. Well, I am assuming in my prioritizing there, Senator, the fact that there has been a thorough investigation of all of the concerns in the case.

Senator FORD. Well, you assume something that has not been, because you have not been there to be assured that there is a thorough investigation and sometimes when you have an investigation there are some things that you need to go back and revisit. I am not trying to tell you how to run your business, but under the circumstances, coming from a law firm that is there for a profit, you win some and develop a reputation.

Here, you are on much less salary I am sure and that you are here to do the consumer's good, or their bidding, and the bottom line is to protect the consumer and not the profit or the winnable case and so I hope you will be as strongly-motivated on those type of cases and those that you look at and say hey, we can win this one.

Ms. OWEN. Well, I guess I proceed from the assumption that consumers would be benefited by winning. I think that sends a very strong message to the people who might be tempted to skirt the law.

Senator FORD. Yes, but little cases and winnable cases that maybe they will add up, but a small case that was winnable versus one that has major impact, the major impact may come out in favor of more consumers than just the small case.

Thank you, Mr. Chairman.

Senator BRYAN. Thank you very much, Senator Ford. Senator Pressler?

Senator PRESSLER. Thank you. I just have a couple of questions, Mr. Chairman.

First of all, in one of your answers you say that critics have sometimes asserted that there is no need for two antitrust agencies, the Federal Trade Commission and the Justice Department, and I would like you to expand on your response a bit in this whole area of antitrust. When should the Justice Department take the lead and when should the Federal Trade Commission take the lead?

Ms. OWEN. Well, senator, under liaison procedures between the two agencies that have been established over the years, the Justice Department takes the primary responsibility for criminal enforcement. There are other areas where the Federal Trade Commission has taken the lead, such as the Robinson-Patman Act.

There are then, I think, in terms of various industries—for instance, the FTC has been seen as expert in the oil industry mergers. The Department of Justice has other areas, I think some heavy manufacturing areas, that they have focused on. So there is a rather informal division, I believe, just on the basis of subject matter.

Senator PRESSLER. Is this a statutory division, or just the way things have evolved?

Ms. OWEN. It is a memorandum of understanding, as I understand it, in the way things have evolved, in terms of the way various cases have been divided up between the two agencies.

Senator PRESSLER. I am very interested in the price that small cable companies pay for television entertainment and I have a piece of legislation that is directed at the situation where big programming producers, who also own parts of cable companies, give certain prices to big cable companies and differing prices to small ones. Is that something that the FTC could take action on?

Ms. OWEN. Senator, I am not exactly clear on the jurisdiction there. I know in the past, I believe the Justice Department has done some work in the area of the communications industry, but precisely who would have the best expertise in terms of the staff availability, I really could not tell you.

Senator PRESSLER. Thank you very much.

Senator BRYAN. Thank you, Senator Pressler.

Senator Burns.

Senator BURNS. Thank you very much. And thank you, Ms. Owen, for coming up this morning. It is sort of early to get around.

I think I would like to make a statement right now that sends some sort of a signal. You know, there is no doubt that you have been around this Hill a long time; I mean just about all of your experience is within this Beltway, and that concerns me. To be right honest with you, it concerns me.

And of course, we had some people from out in the West that applied and were considered for jobs such as these, but after what they went through, they decided it was not worth all the bother. But I am finding that maybe it is, and I am concerned that we get entrenched in this bureaucracy back here, and we cannot get out of it. And the reason we cannot get out of it is because the same people are recycled through all of the agencies.

And there is no doubt, just looking over your list of qualifications here, that you are qualified for this job. But I am just wondering how much time you ever spent in American business, say in Toledo, Ohio?

Ms. OWEN. Well, Senator, I have to tell you that, I have not spent much time there, because I was born in this area. This is my home area.

Senator BURNS. That concerns me. And I know we cannot help where we are born.

Ms. OWEN. I went to school in Massachusetts.

Senator BURNS. I am wondering how much experience you have had actually operating in this business called free enterprise and really understand what they have to go through, number one, to satisfy stockholders, and number two, to carry on the business of this country, which is business.

Ms. **Owen**. Senator, I work with a variety of clients who are located throughout the country, and in connection with my representation of various business clients, I think I have a sensitivity from listening to them in terms of what they have to go through to conduct their business.

Senator **Burns**. Are you familiar with the Commodity Credit Corporation?

Ms. **Owen**. No, sir, I am not intimately familiar with that.

Senator **Burns**. Export enhancement programs?

Ms. **Owen**. I have had some clients who have discussed those as a possibility. We have not had any in depth representation in that area.

Senator **Burns**. Thank you very much.

Senator **Bryan**. Thank you, Senator Burns.

Senator Kasten.

Senator **Kasten**. Mr. Chairman, thank you.

I enthusiastically support this nomination, and I am hopeful that we are going to be able to, in an expedited kind of procedure as I said with regard to Janet Steiger, deal with both of these nominations very quickly. I think we have got a unique opportunity, notwithstanding what my friend from Montana just said, we have got a chance here, because one of the challenges we have got, Mr. Chairman, is to get that reauthorization bill through. And I am just struck by the pluses.

I think there is a plus and a minus side to part of what my friend from Montana said. We have got Janet Steiger with a tremendous amount of experience in the Federal Government. We now have this nominee with a depth of experience with regard to working with Congress. And I think we have got a good group of people here that will work with us, not only for the goals that both of them have talked about in terms of free enterprise and the balance of the regulatory process, but also, importantly, in terms of working with the Congress and the Senate in terms of the reauthorization and other measures.

I sense that both of these nominees could be helpful to us, not only in terms of reauthorization, but also as we develop legislation which affects the areas that they are working on. We can go to them for help, and advice, and guidance. And when we pass legislation that affects the different consumer issues and regulatory issues that are in their arena, it is going to make a difference. And so I think there are some real pluses with these two nominees, and I look forward to actively supporting them.

I know you were in the room when we talked about a particular issue that we have in Wisconsin, and I just want to say that it is important that I ask that you at least look at the reinstatement of the dairy merger reporting program. As I said, it had been terminated by the Commission in 1981, and it was put back in in July of 1988.

It is a long dispute that has gone back and forth between agencies and also within the Federal Trade Commission. I think they have ended up with a decision that needs to be reconsidered, and I simply want to ask your attention to this matter.

Ms. **Owen**. Senator, I will be glad to give it my very serious attention. And I thank you very much for your kind remarks.

Senator **Ford**. And you just understand parochialism.

Senator **Kasten**. They have cows in Maryland, too, Senator.

Senator **Ford**. I understand. But Wisconsin is the dairy state, you know.

Ms. **Owen**. Yes, sir, I know.

Senator **Ford**. And when you get on tobacco, honey, will you remember me?

If they are going to start getting in their little pitch, I want to get mine in, too.

Senator **Kasten**. Thank you, Mr. Chairman.

Senator **Bryan**. Thank you very much, Senator Kasten.

Let me just add one more point, if I may, Ms. Owen. Your response to Senator Ford's question at least raised a level of concern, and that is, I do not believe that the sole criterion on whether the FTC ought to proceed on a case is whether it is winnable or not.

Admittedly, that has to be part of the consideration, but you will be involved in the formulation of public policy in the sense of how far and how aggressive the agency is going to be to make sure that marketplace out there is truly free, and truly free from the kind of impediments of unfair competitive practices and other items that are within the FTC's jurisdiction. Clearly, there may be cases that are less winnable in the sense of a probability, one being a slam dunk and the other one that you as a lawyer feel that you can win but will be much more difficult.

I do not have any particular area or any particular case in mind, but I do think Senator Ford's point was well taken, that it is not strictly the same as a private sector determination, because the public policy impact of a particular category of cases, although far more difficult and far less probable of success, may outweigh a case which has relatively little impact in the marketplace, in which all of us as lawyers would agree yes, if there is a sure thing in life, that looks like it is a sure thing. I would just ask that you be conscious of that role as a member of the Commission.

Ms. **Owen**. Senator, I do not think we are very far apart in terms of our feeling in this area. I think the problem that I was attempting to address in my written remarks, which prompted the questioning here, is the fact that there have been circumstances where some major cases have been brought in the past by various agencies where perhaps there is a consistent record of losing. And I think that sends a bad signal to the business community in terms of the likelihood of being punished or encountering any kind of penalty for anticompetitive behavior.

It also sends a bad signal to consumers as well, that law enforcement does not seem to be effective and that business people can get away with things. And so that was really what prompted my remark in this area.

Obviously, there are a lot of things that go into determining what a good case is; and I think winning is one. But there are obviously public policy concerns, too. For instance, the ABA report talks about using some different techniques, particularly in areas where the law is not very clear, to make a public policy statement.

And those are just as worthy of consideration as the easily winnable cases.

Senator **Bryan**. Thank you very much.

The committee has received correspondence regarding your nomination from Congressman Cardin and former Governor McNair of South Carolina, and without objection, these letters will be made a part of the record.

We will hold the record open to allow our colleagues to submit any additional written questions they may choose, and I would ask that you respond to those, if indeed there are questions forthcoming. Because I took a little bit of time in the second round of questions, I would ask my colleague, Senator Kasten, if he has any other questions?

Senator **Kasten**. Mr. Chairman, I have no further questions.

Senator **Bryan**. There being no further questions, we thank you very much, Ms. Owen, and the committee will stand in recess.

[Whereupon, at 8:55 a.m., the committee was adjourned.]

[The following information was subsequently received for the record:]

POSTHEARING QUESTIONS OF SENATOR BRYAN AND THE ANSWERS OF MS. OWEN

1. As Chairman of the Consumer Subcommittee, which has oversight over the FTC, I am concerned that the channels of communications remain open between the Subcommittee and the FTC.

a. Please identify specific steps or idea that you have about how these communications might be improved.

Establishing regular channels of communication between the members and staff of the Subcommittee, and the members and staff of the FTC are essential. Often, this can be done somewhat informally by setting up meetings on a regularly scheduled basis to discuss and share information on the concerns of the Subcommittee and the agenda of the Commission.

b. In your view, what is the extent of the FTC's responsibility to provide information about its activities to the Congress?

It is important for the Commission to keep the Congress, and in particular the oversight and appropriations committees, informed on a routine and timely basis of the plans and activities of the Commission. Responses to Congressional requests for information should be prompt and useful.

2. The Kirkpatrick Commission and others have stated that resources at the FTC are a cause for serious concern. In fact, the FTC's workyears are 53 percent of what they were a decade ago. In view of the overall budgetary constraints the government is operating under, the FTC may not receive many additional resources in the near term.

a. Do you have specific ideas about what should or could be done to make more efficient use of the FTC's resources?

In the absence of an in-depth study of the agency's functions and budget, and lengthy consultation with the agency's budget staff, it is difficult to propose any specific improvements to enhance the efficient operation of the Commission. Generally, I would recommend efforts to improve coordination with the regional offices, the states, and the Justice Department on matters of mutual concern. Moreover, I would recommend redirecting resources from whatever activities there may be, if any, that are not clearly founded in the agency's mandate.

3. I know that you have had some experience in antitrust matters, in your private practice of the law.

a. Do you feel the FTC is exercising too much control, too little control, or just about the right amount of presence in the field of antitrust law?

There is a perceived need for demonstrative and visible action in the area of merger enforcement in order to allay wide-spread public concern about numerous and large mergers. In this regard, and in light of concerns expressed about whether or not federal antitrust authorities are in fact enforcing guidelines currently in place, it may be timely to reexamine existing guidelines with an eye toward making any necessary improvements, and subsequent scrupulous adherence.

b. Can you identify specific antitrust areas to which you think the FTC should devote more resources?

Due to the responsibilities imposed under the Hart-Scott-Rodino Improvements Act, in the antitrust area, merger enforcement must necessarily receive the highest priority. In light of a recent recommendation by an ABA Task Force to repeal the Justice Department's Vertical Restraints Guidelines, it may be timely to reexamine the FTC's allocation of resources in this area.

4. In my state of Nevada, two FTC-related issues have been particularly troublesome recently: telemarketing fraud, and gasoline price increases. I recently wrote to the FTC about the gasoline pricing matter, and received a response which indicated that the industry is not unduly concentrated, and that the price increases are explainable by market conditions.

a. Do I have your assurance that you will work to ensure that the antitrust laws are faithfully carried out, particularly regarding matters in the gasoline market, and that consumer fraud is aggressively attacked?

Yes.

5. The Kirkpatrick Commission stated its belief that the FTC can and should do more to articulate its advertising agenda. According to the Commission's report, "too rarely has the public received the message that the FTC believes it is important to move aggressively against false and deceptive advertising."

a. Do you agree with this statement? If so, what steps might you suggest for the FTC in articulating its agenda in the area of advertising?

The Kirkpatrick Commission was not united on the question of whether the FTC is prosecuting its share of advertising suits, but it did agree on the need to articulate an agenda. Just as in antitrust enforcement, it is imperative for the public to perceive that there is a visible and active law enforcement entity in the advertising area.

In terms of better articulating the Commission's agenda in this area, the promulgation and improvement of public standards and guidelines, such as the deception statement and the advertising substantiation standards, are important. Furthermore, improving coordination with the states in this area, and applicable liaison procedures, should also help send the message.

BENJAMIN L. CARDIN
3D DISTRICT, MARYLAND

COMMITTEE ON PUBLIC WORKS
AND TRANSPORTATION

COMMITTEE ON THE JUDICIARY

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July 28, 1989

Senator Richard H. Bryan
United States Senate
Washington, D.C. 20510

Dear Senator Bryan:

I am sorry that I am unable to introduce Ms. Owen in person but a scheduling conflict arose. I am pleased, however, to have the opportunity to write and recommend my constituent, Ms. Deborah Owen as you begin hearings on her nomination for the Federal Trade Commission. I am sure that she will make a fine member of the Commission.

Ms. Owen and her family have been life-long residents of the State of Maryland. In 1972, she graduated from the University of Maryland with a "straight A" average. She continued on to graduate from Harvard Law School. She was a summer clerk and associate at Piper & Marbury, a well respected law firm in Baltimore. Currently, Ms. Owen is the managing partner of the Washington branch of the McNair Law Office.

Along with Ms. Owen's high educational attainment, she has a wealth of knowledge about Capital Hill. She has had the opportunity to work in both the House and Senate. She has worked for Congressman Larry Hogan on the House Judiciary Committee, the Minority Counsel to the House Judiciary Committee, the General Counsel to the Senate Judiciary Committee, and the Associated Counsel to the President. I believe these experiences make Ms. Owen an outstanding candidate for the Federal Trade Commission.

Thank you again for allowing me the opportunity to recommend Deborah Owen on her nomination to the Federal Trade Commission.

Sincerely,

Ben Cardin

Benjamin L. Cardin
Member of Congress

BLC:cwl

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JUL 31 1:56

July 26, 1989

The Honorable Ernest F. Hollings
Chairman, Senate Commerce Committee
125 Russell Senate Office Building
Washington, D. C. 20510

Dear Senator:

Please accept this letter as my strong endorsement of Deborah K. Owen as a member of the Federal Trade Commission.

This commendation to you is given with mixed emotions on our part. Since March of 1986, Debbie has been an invaluable member of our firm, in our Washington office, with her extensive background and expertise in complex legal issues, antitrust matters, and legislative process and procedure.

Additionally, since September of 1987, and the untimely death of Judge Emory Sneeden, Debbie has contributed immeasurably her skills as the Managing Shareholder of that office. She will be a great loss for our law firm. We do, however, recognize and applaud her desire to serve her country once again, and know she will be an enlightened servant, not only of the United States and the Federal Trade Commission, but for those who are or may be impacted by that Commission's jurisdiction. Having served as Counsel to the Senate Judiciary and worked closely with Judge Sneeden over the years, she is extremely well equipped to serve on this commission.

It is, indeed, my privilege to commend to you and to your Committee this highly intelligent, honest and capable lawyer whom we anticipate will work closely with you and the Congress.

With warmest personal regards and best wishes, I remain

Sincerely yours,

Robert E. McNair

REM:jcb

NOMINATIONS—JULY

MONDAY, JULY 31, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The committee met at 10:00 a.m. in room SR-253, Russell Senate Office Building, Hon. Ernest Hollings (Chairman of the Committee) presiding.

Staff members assigned to this hearing: Mike Nussman and Penny Dalton, professional staff members; and Ruth Johnson, minority professional staff member.

OPENING STATEMENT BY THE CHAIRMAN

The CHAIRMAN. The committee will please come to order.

Dr. Knauss, you educated me on the needs for the ocean some years back, so you know how highly pleased I am and the overwhelming majority of this committee is at your appointment as the Administrator of the National Oceanic and Atmospheric Administration.

Today, we are here to consider the nomination of Dr. John A. Knauss to become Under Secretary of Commerce for Oceans and Atmosphere. I am pleased to welcome Dr. Knauss today—both as an old friend and as someone who shares my longstanding interest in understanding, using, and protecting our oceans.

Dr. Knauss has been involved in marine research and policy for almost 40 years. He was a member of the Stratton Commission, whose sweeping insights have guided the development of our nation's ocean policy for the past two decades. In 1969, the Commission called for the formation of a new Federal agency, the National Oceanic and Atmospheric Administration. That recommendation, of course, was implemented one year later in Presidential Reorganization Plan No. 4. Now President Bush was called upon Dr. Knauss to lead the agency which he helped to create, and to chart NOAA's course for the years and decades to come.

Dr. Knauss, I hope that you will be willing to work closely with us in determining exactly what course will be. You and I have watched NOAA for almost twenty years now. We participated in the excitement of planning new programs in the sixties. We saw the implementation and expansion of innovative new programs like Sea Grant and Coastal Zone in the seventies. And in the eighties, we worked to maintain those programs in the face of a disinterested Administration and growing federal budget deficits.

Over that period, the environmental concerns which motivated us clearly have not been resolved. Millions of Americans continue to move to coastal areas, and preventing contamination of our estuaries and coastal waters by runoff and sewage has become a greater and greater challenge. In recent years, we have been shocked and deeply disturbed by the *Exxon Valdez* oil spill, by discarded syringes and medical wastes washing up along our coastlines, by unexplained die-offs of dolphins and other marine life, and by the growing number of "closed" signs on our public beaches. In addition, we have recognized the seriousness of the threat posed by global environmental change. Greenhouse warming, world climate shifts, sea-level rise, and ozone depletion could cause serious loss of life and substantial property damage worldwide.

In the context of these concerns, many of our goals and objectives in 1970 may be more critical today than they were when NOAA was formed. I can recall my own words at the time:

> The new NOAA should encourage, develop, and sustain a national program in the marine and atmospheric environments, conducted so as to contribute to the following objectives:
>
> The expansion of human knowledge of the marine and atmospheric environments, and
>
> The advancement of capability to observe and predict environmental changes, . . . in order to enhance the safety and welfare of the public and to permit more efficient use of the oceans and atmosphere.

One of the first steps I would ask you to take in assuming leadership of NOAA is to take a thoughtful look at where the agency has been, and where it should be going. NOAA can play a critical role in helping us to understand and deal with global environmental problems—I hope that we can work together to ensure that it does.

We are honored to have two distinguished colleagues from your state of Rhode Island, and we will be delighted to recognize Senator Pell.

STATEMENT OF HON. CLAIBORNE PELL, U.S. SENATOR FROM RHODE ISLAND

Senator PELL. Thank you very much, Mr. Chairman and members of your committee. It is a great pleasure to introduce today John Knauss, who has been nominated for this very important job. This is a wonderful nomination and a great credit to the administration and a great credit to my colleague, Senator Chafee, who played a very real role in bringing this nomination to the attention of the administration.

John Knauss came to Rhode Island in 1962 to serve as Dean of the Graduate School of Oceanography at the University of Rhode Island. At that time I was serving my first term as Senator from Rhode Island, and we got to know each other quite quickly. In the past 25 years we have worked together closely and frequently on a very wide range of federal government policies and programs in oceans and marine policy both national and international.

We got to know each other rather quickly and in the past 25 years we have worked together closely and frequently on a wide range of federal government policies and programs in oceans and marine policy, both national and international.

We worked together in the development and establishment of the National Sea Grant College Program, on negotiations for a new International Law of the Sea Treaty, on preserving freedom for scientific exploration of the seas, and on issues involving the ocean research programs of the National Science Foundation. During those years John Knauss also found time to serve as Chairman of the National Advisory Committee on Oceans and Atmosphere.

In my view, Mr. Chairman, this nomination is one of the finest appointments made by President Bush. John Knauss ranks among the most able, respected and capable of oceanographic leaders in the nation. He is a fine administrator who is responsible for the development of the URI Graduate School of Oceanography into one of the leading marine science centers in the United States.

He is intimately familiar, not only with NOAA, but with all marine science programs of our federal government and is a fine scientist and one of a handful of marine science leaders in the United States who is truly regarded as a statesman of marine policy.

And, finally, Dr. Knauss is a man of unquestioned integrity. I hope that he will receive the prompt approval of this committee.

The CHAIRMAN. Well, Senator Pell, you are considered the father of the Sea Grant Program.

Senator PELL. The grandfather by now.

The CHAIRMAN. Well taken.

Now, we have other committees coming along and trying to get a reasonable reorganization, and they think the problem is organization. The problem is money. You and I, we have a struggle because each year the administration red lines a tremendous amount, abolishing this and red lining another program and cutting the budget. It is noteworthy that you have come now, because I wanted Dr. Knauss to know exactly where we are.

We are in the soup up here, and we are ready, willing, and able. And we have had a struggle to keep our National Ocean Policy Study going, our Sea Grant Program going, and NOAA itself current. I appreciate your appearance here this morning.

Senator Chafee.

STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM RHODE ISLAND

Senator CHAFEE. Thank you, Mr. Chairman. First, I want to thank you for bringing up this nomination swiftly. And, if the committee looks on the nominee with approval, I would hope that perhaps we might be able to get it through on the floor before the recess if that were possible.

As you already know, Mr. Chairman, Dr. Knauss is a highly acclaimed oceanographer, recognized by his colleagues as one of the most knowledgeable and experienced in the field, and I think it is fair to say that Dr. Knauss has truly shaped the science of oceanography.

His career spans four decades. He came to the University of Rhode Island from the Scripps Institution of Oceanography of the University of California in 1962 to become the first Dean of our University of Rhode Island Graduate School of Oceanography, and during his 25-year tenure as Dean of that school, he built it into one of the top marine research and study institutions in our country. As a matter of fact, last fall NOAA designated the University of Rhode Island School of Oceanography as a "Center of Excellence in Coastal Marine Studies."

Dr. Knauss' abilities and experience have been appreciated not only by those of us in my home state, but by Presidents of our country. He has been appointed to both the Presidential Commission on Marine Science, Resources and Engineering—the so-called Stratton Commission—and the Presidential National Advisory Committee on Oceans and Atmosphere. He has also served as chairman, and is still a member or a fellow, of the National Advisory Committee on Oceans and Atmosphere, and the Association of Sea Grant Program Institutions. I cannot think of a better person that our President could have selected to head the National Ocean and Atmospheric Agency than Dr. Knauss.

We in Rhode Island are all proud of what Dr. Knauss has achieved. He is superbly qualified as both an oceanographer and an administrator, which, of course, is a big part of this job. My endorsement of Dr. Knauss is wholehearted and enthusiastic.

Again, thank you, Mr. Chairman, for taking up this nomination swiftly.

[The statement follows:]

STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM RHODE ISLAND

I would like to thank Senator Hollings, and Senator Danforth, and all the members of the Committee, for giving me the opportunity to introduce Dr. John Knauss to you. It is a real pleasure and an honor to have Dr. Knauss come down to Washington, D.C., and if I can convince my colleagues on this Committee and in the Senate, he will be staying here for a while.

As you already know, Dr. Knauss is a highly acclaimed oceanographer, recognized by his colleagues as one of the most knowledgeable and experienced experts in the field. In fact, John Knauss has helped shape and define the science of oceanography as it is known today. His nomination as Administrator of NOAA is particularly appropriate, since he served on the Stratton Commission upon whose recommendation NOAA was created in 1970.

It is difficult to do justice to Dr. Knauss' credentials in the short time that I have this morning. His career spans four decades, and includes a host of notable achievements in academia, government, and publishing.

In 1962, Dr. Knauss left the Scripps Institution of Oceanography of the University of California to become the first Dean at U.R.I.'s Graduate School of Oceanography. During his 25-year tenure, be built the school into one of the top marine research and study institutions in the nation. Last fall, NOAA announced the designation of the School of Oceanography as a "Center of Excellence in Coastal Marine Studies" at a ceremony in which then-Secretary of Commerce Bill Verity and I took part. That recognition was in large part due to Dr. Knauss' achievements as Dean.

Dr. Knauss' abilities and experience has been appreciated not only by Rhode Islanders, but by Presidents. Appointed to both the Presidential Commission on Marine Science, Resources and Engineering (the Stratton Commission) and the Presidential National Advisory Committee on Oceans and Atmosphere, he has also served as chair—and is still a member or Fellow—of the following organizations: the National Advisory Committee on Oceans and Atmosphere, the Association of Sea Grant Program Institutions, the Ocean Science Committee of the National Academy of Sciences/National Research Council, the Marine Division of the National Association of State Universities and Land-Grant Colleges, and the Oceanographic Section of the American Geophysical Union.

I'd say that's a pretty impressive—and yet still incomplete—list.

His excellent track record doesn't stop there. A prolific and respected writer and author of two textbooks, John Knauss also has received the 1974 National Sea Grant Award, the 1986 Rhode Island Science and Technology Award, and induction into the Rhode Island Heritage Hall of Fame in 1982.

NOAA's mission is one of the most important of any agency in the federal government today. As you know, NOAA runs a series of diverse operations, including the

National Marine Fisheries Service and the National Weather Service, all of which involve the daily monitoring of our global environment.

Right now, we are seeing an explosion of concern—from the President to Congress to kids in school—about the health of our environment. And with good cause. Global warming, air and water quality, and deforestation are some of the major issues directly related to the well-being of our population and our Earth. In this context, NOAA is playing a vital role. To lead NOAA, we need a person with deep knowledge, keen vision, and strong managerial skills.

I can think of few others who are as qualified for the position of Undersecretary for Oceans and Atmosphere as is John Knauss. We in Rhode Island know him as the guiding spirit of the URI School of Oceanography and as a respected, superbly-qualified oceanographer and administrator. In the words of a recent Providence Journal editorial, Dr. Knauss can be expected to handle the job of Administrator with distinction.

Mr. Chairman, my endorsement of John Knauss is wholehearted and enthusiastic, and I urge my colleagues' concurrence.

Thank you.

The CHAIRMAN. Thank you, Senator Chafee, and I am confident you and Senator Pell both have other hearings this morning, and we appreciate your appearance. You can stay with the committee if you wish or be excused. Dr. Knauss will not have any trouble with this group.

And I commend Secretary Mosbacher. He has been very conscientious, and when he first mentioned that he was even trying to find someone outstanding, and your name was mentioned, I said that gentleman would be the most outstanding because that is who we started with in the Stratton Commission with Dr. Julius Stratton years ago when I first came up here and started this work with Senator Magnuson. And so, we appreciate your appearance here this morning, and we hope to report this out tomorrow at our markup and vote on it before we leave for August.

Senator CHAFEE. Do you mean vote on the floor?

The CHAIRMAN. Yes, vote on the floor. We will have it on the floor this week.

Senator CHAFEE. Wonderful. Thank you very much.

The CHAIRMAN. Thank you both.

Dr. Knauss, we would be delighted to hear from you, sir, at this time.

[The biographical sketch and prehearing questions and answers follow:]

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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Knauss (Last) John (First) Atkinson (Other)

Address: 126 Willett Road (Current residence)
Saunderstown, Rhode Island 02874

University of Rhode Island (Business)
Narragansett, Rhode Island 02882

2. Position to which nominated: Under Secretary of Commerce for Oceans and Atmosphere
Date of nomination: July 20, 1989

3. Date of birth: September (month) 1 (day) 1925 (year)
Place of birth: Detroit, Michigan

4. Marital status: Married
Full name of Spouse: Marilyn Mattson Knauss

5. Names and ages of children:
Karl Mattson Knauss 28
William Atkinson Knauss 26

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Central Michigan College of Education	7/43-2/44	none	
Massachusetts Institute of Technology	2/44-2/46	B.S.	1946
University of Michigan	1947-49	M.S.	1949
Scripps Institution of Oceanography	1951-52 1955-59	PhD	1959

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From To	Name of employer	Address	Type of work
2/46-10/46	USNR, Fleet Weather Central	San Diego, CA	Officer
10/46-11/46	Unemployed		
12/46-8/47	Navy Electronics Laboratory	San Diego, CA	Physicist
9/47-6/48	University of Michigan	Ann Arbor, MI	Graduate Student
7/47-8/48	Navy Electronics Laboratory	San Diego, CA	Physicist
9/48-6/49	University of Michigan	Ann Arbor, MI	Graduate Student
7/49-11/49	Unemployed		

CONTINUED (See page 2A)

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

I have been employed by Federal and State government, (see item 7 above). I have served on a number of committees of the National Academy of Sciences-National Research Council which have provided, as requested, advice to agencies of the Federal government. I have also served on advisory committees to the National Science Foundation and the State Department. I was appointed by President Johnson to the Commission on Marine Sciences Engineering and Resources (the Stratton

CONTINUED (See page 2B)

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

I have held no political office or been affiliated with any political party in the past 10 years. I contributed $200 to Senator Chafee's reelection campaign in 1988. To the best of my recollection, I believe I contributed about $100 to Congresswoman Schneider in 1978 and 1980. Mrs. Knauss and I sponsored political gatherings at our house for Congresswoman Schneider.

2 A

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From To	Name of employer	Address	Type of work
12/49-8/51	Office of Naval Research	Washington,D.C.	Oceanographer
9/51-12/52	Scripps Institution of Oceanography	LaJolla, CA	Graduate Student
1/53-12/54	USNR Office of Naval Research	Washington,D.C.	Officer
1/55-2/62	Scripps Institution of Oceanography	LaJolla, CA	Graduate Student Staff Member
2/62-present	Graduate School of Oceanography	University of Rhode Island	Professor of Oceanography

(During my tenure at URI I have held the following administrative positions: Dean, 1962-87; Provost for Marine Affairs, 1969-82; Vice President of Marine Program, 1982-1987.)

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

Commission) which brought forth the recommendations leading to the establishment of NOAA. I was chair of the panel of the Stratton Commission that brought forth the recommendations that led to the 1972 Coastal Zone legislation. Earlier I called the first national conference to explore the concept of "sea grant colleges," and later worked closely with Senator Pell toward passage of that legislation. I was appointed by President Carter to be a member of the National Advisory Committee on Oceans and Atmosphere and was reappointed by President Reagan as chair of NACOA.

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Professional (ocean)

American Association for the Advancement of Science

vice president, section on atmospheric and hydrospheric sciences 1972-73

American Geopnysical Union

president, oceanographic section 1965-67

American Meteorological Society

council member 1980-82

Marine Technology Society

vice president 1977-78

CONTINUED (see 3A)

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Elected to Sigma Xi and Phi Kappa Phi

National Sea Grant Award, 1974

Elected to Rhode Island Hall of Fame, 1982

Rhode Island Science and Technology Award, 1986

Ocean Science Award of the American Geophysical Union, 1988

Sea Grant Fellowship Program named the Dean John A. Knauss Fellowship Program by Act of Congress, 1988

Ram Award of the University of Rhode Island Alumni Association

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Professional (law of the sea)

Council on Ocean Law

member of board of directors since 1983

Law of the Sea Institute

member of executive board, 1982-87

Professional (service)

Marine Division of the National Association of State Universities and Land Grant Colleges

chair-elect and chair, 1983-85

Joint Oceanographic Institutions Inc.

chair, 1979-80

Joint Oceanographic Institutions Deep Earth Sampling (JOIDES)

chair of executive committee, 1984-86

Association of Sea Grant Program Institutions

president, 1970-71; secretary, 1971-74

Professional (honorary)

Sigma Xi

Phi Kappa Phi

Social

Saunderstown (Rhode Island) Yacht Club

Political

United World Federalists

president, University of Michigan Chapter, 1948-49

QUESTIONS FOR THE RECORD TO JOHN A. KNAUSS
FROM CHAIRMAN ERNEST F. HOLLINGS
SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION

GENERAL

1. **If confirmed as Under Secretary, what do you see as your most important responsibilities? With what issues will you concern yourself in the near future?**

If confirmed, I will work with NOAA managers to review priorities of the President, the Secretary and the Congress related to National oceanic and atmospheric needs in the 1990s. We will also examine NOAA's capabilities in human resources, facilities, infrastructure, and identify strengths or weaknesses to respond to national needs. Based upon this assessment we will develop coherent strategies to pull together NOAA's capabilities to achieve important oceanic and atmospheric goals of the 1990s. We want to make the most of NOAA's oceanic and atmospheric assets through improved NOAA management.

In the immediate future, my primary concern is the preparation of the President's FY 1991 budget request, which is already well along. I will work to see that the '91 budget enables NOAA to begin to take action on high priority national needs involving climate and global change, weather service modernization, coastal oceans science and data management, as well as critical NOAA infrastructure requirements for the 1990s.

2. **The National Oceanic and Atmospheric Administration (NOAA) represents close to 50 percent of Commerce Department's budget and well over a third of its personnel. Yet, atmospheric and oceanic issues historically have received very little attention from top DOC officials. In addition, some recent DOC decisions involving NOAA appear to be reactionary, rather than reflecting a good understanding of the agency and its responsibilities. If confirmed, what will you do to address this problem?**

I feel that if there have been any recent problems during this period of transition, they would have been by and large due to problems associated with the lack of a complete senior management team in place.

If confirmed, I plan to be an active and visible member of the Department's management team to ensure that the nation's oceanic and atmospheric needs are met within the parameters established by the Administration and the Congress.

3. **You and I have worked together on numerous ocean and atmospheric issues, culminating in the creation of NOAA in 1970. I look back at the problems of that time and ahead at such long-term threats as global climate change and coastal degradation. How well has the agency met the expectations with which it was formed? If confirmed, what action would you take to ensure that NOAA meets the challenges of the future?**

Given the budget constraints under which the agency has had to operate, I feel the Agency has performed well in meeting the needs which we identified in the 70s and 80s. I am impressed by the professional compentence of the staff.

However, we all realize that there are new and more complex needs and problems in the oceanic and atmospheric arena such as global climate change and the crisis faced by increasing demands and uses of our coastal resources. I will assure this Committee that I will devote my abilities and energy to effectively deal with these problems by pulling all NOAA capabilities together to focus on effective action.

WEATHER SERVICE

4. **In recent years, we have heard a great deal about the need to modernize our Weather Service and improve our public weather warnings and forecasts. On this subject, the Administration's rhetorical commitment has been very strong. However, their willingness to come up with the necessary funds has been weak. I am particularly concerned about the lack of support for communications and information management systems which will pull together the information from the new radars, weather satellites, and automated observation systems. How do you plan to address this problem?**

In March 1989, the Executive Branch submitted a strategic plan for the modernization of the National Weather Service that calls for the entire suite of new technologies to improve weather warnings and forecasts in the 1990s. That plan is now before the Congress for review and approval. We should work together to prepare for proper implementation of that plan.

5. Congress recently received the Department's strategic plan for modernizing and restructuring the National Weather Service. What problems do you envision with the implementation of that plan?

The complexity and importance of the nearly decade long modernization will be a continuing challenge for NOAA managers and employees. Numerous scientific, technical, and logistical details must yet be worked out to realize the benefits of the NWS modernization. In particular, the development of operational mesoscale meteorology is really a new field; we must work with NOAA scientists and researchers in the academic community to focus on this storm scale aspect of weather forecasting. In view of the continuing environment of budgetary austerity, the problem of obtaining adequate capital funding for the modernization must be addressed without interruption of current NWS operations.

NOAA SATELLITES

6. **What are your objectives for NOAA's satellite programs in the upcoming decade?**

I plan to maintain continuity in meteorological satellite observations, pursue associated satellite services such as SARSAT, look to opportunities to expand ocean observations with NOAA satellites and the satellites of other agencies and countries, and to implement the Administration's objectives in land remote sensing.

7. In recent years, satellite costs have taken up an increasing portion of the NOAA budget. What suggestions can you offer for preventing satellite overruns from eating into the funds available for other NOAA programs?

NOAA, I am told, has experienced cost overruns beyond its control in the developmental phase of GOES Next. This should end with the successful completion and launch of GOES I. I intend to work with NASA and the aerospace industry to seek a more stable funding profile for continued procurement and launch of NOAA's satellite systems.

8. **One commonly held concern is that satellites collect enormous amounts of data, but there is little investment in putting the data into a form that can be used by scientists and others. What could be done at NOAA to address this problem?**

NOAA's mission in acquiring satellite data and validating it by combining it with in-situ data is unique. NOAA has already developed new approaches toward working cooperatively with academic institutions and others so as to perform this function better and to keep up with the enormous amount of environmental data from our satellites and other sources.

NOAA needs to concentrate more on the interface between NOAA and the users of the data we acquire and archive so that the data is available in a timely manner and in a useful form.

In many cases, NOAA can concentrate on the primary data acquisition and quality control functions, as well as assuring data integrity, while providing data to the science community and on a wholesale basis to others who add value to it and help to distribute it to users.

NOAA must prepare for the vast amounts of satellite-acquired data for which it expects to be responsible in the 1990s as a result of new satellite sensing systems. Fortunately, the availability of new technology including NOAA's Class VII supercomputer can help NOAA staff be more productive in coping with this increasing amount of data.

OCEAN AND COASTAL ISSUES

9. Back in the sixties and seventies you were actively involved in the creation of both the Sea Grant and Coastal Zone Management programs. What are your views on the reauthorization and funding needs of these two programs?

Both the National Sea Grant Program and the Coastal Zone Management Program were originally designed to promote more balanced development and use of the Nation's coastal resources. Over the years, these programs have provided significant benefits to our coastal areas and the Nation as a whole. Looking to the 1990s, the continuation of the Federal/State partnerships established by these programs will provide a sound foundation for responding to urgent national coastal problems. In the case of Sea Grant, I believe that we should look at ways that we can balance federal and state responsibilities in marshalling scientific efforts to unravel coastal problems. In the case of Coastal Zone Management, due to increased and changing demands on our coastal resources, the need for sound coastal zone management is as great now as in the seventies. However, it may be time to revisit the current format with a view to redirection to provide for a different mix of federal scientific and technical services to the states for more rational coastal use decisions.

10. In the past year, the public and media have expressed concern regarding coastal degradation and pollution. As NOAA Administrator, what would you do to bring the resources of the agency to bear on this problem?

NOAA is in the process of developing internally, a multidisciplinary program, the Coastal Ocean Initiative, to bring together agency-wide scientific and technical expertise to focus attention on coastal pollution and other problems. The NOAA Coastal Ocean Initiative is designed to utilize the agency's resources in developing research, assessment, and analysis capabilities for predicting changes in our coastal environments and providing essential information to decision-makers. The NOAA Coastal Ocean Initiative will also provide for comprehensive and coordinated policy directives to all involved in the protection of our coastal resources.

11. **A major effort is underway to modernize the Weather Service. What long-term plans do you contemplate for modernizing the rest of NOAA's antiquated infrastructure, e.g. ships, buoys, aircraft and facilities? Where will you place your priorities?**

If confirmed, I will work with NOAA managers to identify systematically the programmatic requirements and priorities for NOAA's ships, aircraft, buoys and facilities in the 1990's. In turn, we will evaluate the condition and capabilities of NOAA's scientific infrastructure with a view to providing recommendations to the Executive Branch and the Congress regarding appropriate action.

GLOBAL CHANGE

12. Given the interest of the Administration, Congress and the public in global climate change, what role should NOAA play in determining our national global change policy? What steps will you take to ensure that NOAA has the resources and leadership needed to carry through with its part of the Federal global change research program?

I agree that issues of climate and global change are among the most urgent on the national and international agenda. There are many complicated scientific questions to be answered--indeed "interdisciplinary earth system science" is the most complex effort ever undertaken by the international earth science community. There are also many important public policy issues to be addressed in the face of incomplete scientific understanding of climate change. Issues involve efforts to reduce or stabilize CO2 buildup (e.g. energy policy or land use policy) as well as efforts to respond to such things as altered regional rainfall patterns or rising sea level. As Undersecretary, I plan to play an active role in such science policy organizations as the Committee on Earth Sciences. Working with Secretary Mossbacher, I also expect to participate in broader public policy development to respond to the broader economic implications of climate and global change. I would like to take this opportunity to thank this Committee for the interest and leadership it has provided on the global and climate change issues.

Fisheries

13. Lack of good information and inadequate enforcement are cited as two major impediments to effective fishery management. Given the Agency's current financial restraints, what steps can you suggest for improving fishery data collection and enforcement?

Fisheries management is absolutely essential to conserve the Nation's renewable, but highly vulnerable living marine resources. If confirmed, I will continue to manage and develop this Nation's living marine resources through sound science, data collection and enforcement efforts and by working closely with the Regional Fisheries Management Councils and state fisheries agencies. We will work with the Congress to explore the best ways to fund fishery management and enforcement programs. As funding mechanisms are considered, we must be mindful of the need to maintain product quality and the economic viability of our commercial and recreational fishing industries.

14. Efforts to monitor and enforce regualtions pertaining to the activities of the high seas driftnet fleet have illustrated a growing need for international fisheries conservation and enforcement. How do you plan for NOAA to address this need?

Increased cooperation with the Department of State, the Coast Guard, and other nations will be a priority to meet international and domestic conservation and enforcement goals. Indeed, it may be important to consider specific ways to involve the United States, Canada, and Pacific Rim Nations in collection and sharing of data to develop enforcement strategies to highlight these important issues. On June 29, 1989 Secretary Mosbacher certified that the Republic of Korea and the Authorities on Taiwan had failed to enter into and implement agreements required by the Driftnet Act of 1987. NOAA has worked with the Department of State to negotiate (1) a cooperative driftnet agreement with Japan, and (2) an an referendum driftnet agreement with the authorities on Taiwan. If the Taiwan agreement is satisfactory there will be no need to impose trade restrictions under the Pelly Amendment against Taiwan. However, the President is to advise the Congress by August 28 on any actions that he takes less than full embargo on Korean fish products.

15. In 1980, Congress stated that "the industry will have the initiative in determining the pace and direction of fisheries development" under the Saltonstall-Kennedy (S-K) program. What do you suggest could be done to ensure that NOAA adheres to this understanding of the law and that priorities set by the industry will guide the S-K grants program?

I understand the importance of industry involvement in Fisheries programs. I will examine the S-K program implementation to ensure that the industry priorities truly guide the program. To carry out its mandate, NOAA has already developed a consultative process to obtain broad industry advice. In developing S-K funding priorities, NOAA seeks advice from a wide spectrum of fisheries organizations including development foundations, trade associations, fishery management councils is to develop a consensus on priorities that address the most critical issues that impact the stability and future growth of fisheries-based industries. In addition, the industry participates in the review of S-K applications and in the funding decision process.

STATEMENT OF DR. JOHN A. KNAUSS

Dr. **Knauss**. Thank you, sir. I would like to thank both Senator Chafee and Senator Pell for the very kind words they said on my behalf.

I would also like to note, Senator, that I brought my wife down for this hearing, and she is also here today.

The **Chairman**. Very good. There is nothing more important, and I say that advisedly, because this Washington game is a sacrifice, you know.

I am sort of more familiar with the Kennedy days. Everybody in 1961 was coming to Washington with high hopes. The heads of universities like yourself, deans, heads of research foundations and heads of American industry were ready, willing, and able to sacrifice as you are doing right here for us. And in the recent years all we hear about is the awesome burden, and no, I am not going to go through the financial reports and the questions that those nasty Senators are going to ask.

It is nonsense. We need the best and the brightest here in government, and I hope you will start a trend in the other direction, particularly to have the wives willing to make that sacrifice to come to Washington with you is very, very important.

Dr. **Knauss**. Now thank you, sir.

I have also suggested that if your questions become too difficult that she take out her handkerchief and begin to cry slightly.

Mr. Chairman, I am honored to be President Bush's nominee for the Under Secretary of Commerce for Oceans and Atmosphere and administrator of the National Oceanic and Atmospheric Administration, NOAA, and I thank you especially, sir, for the exceptional courtesy you have shown in scheduling this hearing so quickly.

From the oldest of the nation's environmental organizations, Thomas Jefferson's 1807 survey of the coast, which later became the U.S. Coast and Geodetic Survey, NOAA's mission now spans the widest range of global research responsibilities and scientific expertise.

NOAA maps the oceans and the atmosphere, forecasts the weather and global climate trends, manages our fisheries resources, protects endangered marine mammals and operates the largest and most dependable environmental data collection, storage and retrieval system in the world. In fact, I see NOAA as what I have been calling the earth system agency of this nation.

It is an organization that has been the home to a number of my scientific heroes from Lieutenant Pillsbury and Spencer F. Baird of the last century to Elton Sett and Joe Smagorinsky, in this one and it continues to be the home of a number of this nation's most important earth scientists such as Susan Solomon and Kirk Bryan. It is an organization in whose formation I played some small part as a member of the Stratton Commission in the last 1960s.

My involvement with NOAA and its programs is of long standing. I worked with you, Mr. Chairman, on the development of the coastal zone management legislation and worked closely with Senator Pell on the establishment of the sea grant legislation.

As a member of the Stratton Commission, I, along with Bob White, NOAA's first administrator, helped write the commission's report, "Our Nation and the Sea." It was that report which has served as the basis for much of this nation's ocean policy for the past 20 years, and which led directly to the formation of NOAA.

More recently I served seven years, four of them as chairman, as a member of the National Advisory Committee for Oceans and Atmosphere, another organization which came about as a result of the Stratton Commission. I believe these experiences will serve me well as Under Secretary of Commerce for Oceans and Atmosphere.

Never have NOAA's responsibilities been more important than they are today. The President, the Congress, the American public and the people throughout the world are concerned about our environment and the effect of humankind on our planet, and we have reason to be concerned.

We are a worldwide population of five billion with boundless aspirations of increasing our standards of living.

For an earth scientist, these are exciting times as we try to understand and predict the ecological consequences of the actions of the world's rapidly increasing population.

NOAA has the primary responsibility to monitor the ecological changes in our planet, whether they be natural or human-induced. It is NOAA's responsibility to collect, store, synthesize and make available to others a variety of environmental data ranging from sunspots and surface temperature to the rate of change in such atmospheric gases as stratospheric ozone and carbon dioxide.

And finally, it is NOAA's responsibility to ensure that this nation has the ability to predict those kinds of environmental changes that are of importance to the well-being of this nation, whether it be hurricanes or fish stocks, global warming or changing shorelines.

Mr. Chairman, let me say I believe NOAA has as dedicated a work force as exists in the federal government. If confirmed, we will work together on the complex agenda that looms large before all of us. We will concentrate on providing scientific excellence and in doing so the efficient and wise use of the taxpayers' resources while accomplishing our mission.

To conclude, Mr. Chairman, 1990 marks the 20th anniversary of NOAA and, more importantly, the first year of what many are already calling the decade of the environment.

Let us all hope for the sake of generations to come that when this decade is over, solutions to some of our environmental problems will be clearer than they are at present.

Upon being successfully reported by this committee and confirmed by the Senate, I look forward to working with each of you in the months and years ahead to pursue aggressively the solutions to our most urgent domestic and global challenges, and I know Secretary Mosbacher and the President join me in that hope.

Thank you, Mr. Chairman.

The CHAIRMAN. Well, in joining you on that hope, can you get by OMB?

Have you talked to Secretary Mosbacher about that?

Dr. KNAUSS. I am sorry, about what, sir?

The CHAIRMAN. About money. You know, you folks have outlined your needs and have been very salient and reasonable, and I know you will be somewhat restrictive. You are not going to ask the federal budget to do just what you want done because we are in an era of budget constraint.

But, be that as it may, you have got a tremendously increased demand, and that has got to be cared for. Over here I have got defense, and no one is stronger on defense then me. But. I have a decreased demand there, and I know where I can save billions upon billions.

Here now we have got the spill in Alaska. I think the one—what was it, *Torrey Canyon*—we studied it for five years. It is going to take NOAA a good five years to study the effect on the ecology and everything else up in Alaska. Is it not?

Dr. **Knauss**. I expect that is correct, yes, sir.

The **Chairman**. And for that five years you need ships, you need personnel, you need an increased effort. Down here at the budget on the OMB level, I am tying up ships. We do not need to do this, we do not need to do that, and we are closing down weather stations.

We are getting out of coastal zone management, and we are refusing to fund our estuarine reserves. Over here the Environment and Public Works Committee, they are starting to put money into your endeavors because no one is taking up for NOAA or, at least, getting the message through to OMB. That is why one of the big concerns, Dr. Knauss, is money in that context.

As a university dean at this moment, you have got the respect of the faculty, and you certainly have got the board of trustees and us the Senate behind you 100 percent.

But you have got to be a promoter to get the endowments and the contributions from the public, and particularly the administration's interest and awareness of the needs in your particular administration.

Dr. **Knauss**. I agree with you, sir.

The **Chairman**. Well, I hope we will work on that. What do you plan with respect, then, to the various endeavors with Sea Grant? Can we get a good review and start bringing to the forefront what we are doing? I think it is an excellent, outstanding program, even in the light of the restrictions. Can we get that done?

Dr. **Knauss**. I hope so, sir.

One of the things that you perhaps know that NOAA has established is a coastal ocean initiative, a rather broad approach to looking at a variety of coastal ocean problems which with respect to our very stressed coastal ocean area. It is one of my major priorities to look closely at, using a cross-cut approach, coastal ocean problems, which includes sea grants, as soon as I am confirmed and on board.

I am very excited about the possibilities.

The **Chairman**. And you can go from that to the global warming. Last fall, I was down at the South Pole with a NOAA lieutenant looking at the hole in the ozone layer. She needed some assistance down there, but her budget had been cut back. In other words, just like the Dutch boy at the dike or whatever—we are just trying to fill out these responsibilities barely, and we ought to beef them up some to get more attention to the research and to the global warning.

Everybody is interested in global warming around this town, but no one has recognized that the lead research agency is NOAA. It is NOAA place, and as you indicated in your opening statement, you have got an outstanding body of talent to lead the way with respect to this particular challenge. So, I hope we will bring those on board.

And then, with respect to the weather, what about these weather stations and everything else? Have you had a chance to look at that yet?

Dr. KNAUSS. Certainly not in any detail, sir, but I am aware of Secretary Mosbacher's statement that there will not be any closing of weather stations until such time as the modernization of the weather service is such that one can guarantee that local weather service in these areas will not be impaired, that the weather service that is provided will be at least as good as what we now already provide.

The CHAIRMAN. Very good.

We are pleased to have our distinguished colleague, Senator Stevens here.

Senator STEVENS. Mr. Chairman, thank you.

Dr. Knauss, I am sorry to have been late. I did visit with Dr. Knauss in my office at length the other day, Mr. Chairman, and I am delighted to see that he is willing to come back once again and have a role in NOAA.

Dr. Knauss, we had a long discussion here after my visit with you concerning user charges in the areas of the jurisdiction of this committee, and particular reference was made to the activities of NOAA.

Have you looked at the product of NOAA enough to venture a comment as to whether we are collecting what we should from those who receive the benefit of NOAA's activities on a day-to-day basis?

Dr. KNAUSS. No, sir, I have not. I have not looked at any detail on the question of user charges.

I am aware of the fact that it is a matter of some interest and some contention, and it is certainly something that is important and something I plan to look into very shortly, but I have not looked at it in detail and I am not really in a position to answer any detailed questions on the subject.

Senator STEVENS. Well, I have had occasion since March, as I told you, to spend a great deal of time with some of the scientists from NOAA who are involved in trying to ascertain the long-range impact of the disaster of the Exxon Valdez.

In some instances, the cost of that research and examination, I understand, will be borne by Exxon. I think we ought to look more at the circumstance of each one of these instances to see if there is a proper assessment of cost to the party at fault.

There was one in Rhode Island, there was one in Delaware, and there was one down in Texas following the Exxon Valdez disaster, and I know that your scientists and the NOAA scientists went to each one.

Dr. KNAUSS. That is correct.

Senator STEVENS. They do an excellent job for the nation, I think, Dr. Knauss, and we are very proud of the fact that they have been involved in the activities in my state. But, I am now concerned as to whether you are prepared to have a policy of pursuing those at fault and have them repay to the government the cost of the long-term and short-term damage such spills have caused to the environment and to the navigable waters of our country. Are you prepared to do that?

Dr. KNAUSS. I am afraid, sir, I do not know enough about the subject to know what the administration policy is on this subject, but I am certainly prepared to look very closely at that problem.

I am aware of the fact that the Exxon is prepared to pay for a large percentage, maybe 100 percent, I am not sure, of the cost of the effort with respect to the cleanup of the *Exxon Valdez* oil spill.

Senator STEVENS. I have not looked into it in detail, but I have the impression that, when the spills are minor in nature and the investigation to assess total long-term damage is more scientific, there has not been very much consideration of the assessment of cost to the party at fault, and I think there should be. I think the *Exxon Valdez* disaster demonstrates what happens with a megaspill, but these minor spills have an impact on the environment, too, and on our marine life.

And I think that the parties at fault, regardless of the size of these spills, ought to be assessed the cost of the activities of your scientific people. And I hope you will look into it.

Mr. Chairman, I think we ought to get the scientists up here one of these days and have them give you their impression of the long-term investigations that will be necessary to pursue the effects of the *Exxon Valdez* disaster.

The Chairman and I, are I guess, the last survivors of the old independent NOAA concept. You came from that age, too, did you not, Dr. Knauss?

Dr. KNAUSS. I was part of the Stratton Commission that made that recommendation, yes, sir.

Senator STEVENS. Have you abandoned that goal?

Dr. KNAUSS. I think that NOAA operates very well within the Department of Commerce and I say that with all sincerity, sir. In a sense, the Department of Commerce has two broad missions, one of which is to increase the standard of living, in some sense, of all the people in the United States and, indirectly, the people of the world.

NOAA is perhaps the flip side of that operation, because it is that increased standard of living of all the people of the world that is causing some of the global environmental problems that we have and will face in the future. Whether it is increased use of oil, increased carbon dioxide in the atmosphere, ozone hole problems and so forth, it is NOAA's mission within the Department of Commerce, as I see it, to essentially monitor and to predict what the consequences are of these environmental effects, which our increasing population worldwide with an increasing standard of living is having on our planet. And so I have no problem with NOAA being in the Department of Commerce, sir.

Senator STEVENS. Well, everybody has to be somewhere, Doctor, but I would hope that we might maintain the goal of seeking ultimately an individual department to deal with the problems of the oceans and the atmosphere. I am not going to press you on it now.

Mr. Chairman, I am hopeful that we will find a way to have a dialogue with Dr. Knauss and his people on an ongoing basis. I think we have slipped away from some of our oversight responsibility with regard to NOAA, and I would urge you to renew it.

And I would urge you at the earliest possible moment, Dr. Knauss, to go up and take a look at what is left of the Prince William Sound.

Dr. KNAUSS. It is high on my agenda, sir. I am planning to do so.

Senator STEVENS. Thank you.

The CHAIRMAN. On the oversight, Senator Stevens, we have had our colleague, Senator Kerry, conducting further hearings again this week on our ocean policy study, and you, Dr. Knauss, will help us regenerate that interest in the Foreign Relations, the Appropriations, and the Finance Committees so they will come forward and begin to realize that organizational structure is there; it is money.

Specifically on weather prediction, that GOES satellite, now we have had a two-year delay. We have a $200 million cost overrun. And with a $1 billion budget, if you get a cost overrun of ⅕ of your budget, you are in deep trouble, particularly when the administration is coming around cutting it one-fifth to begin with.

So that is why I emphasize the need to bring forth the extra research personnel that will stay up in Alaska for five years studying and just taking tests like we did with the Torrey Canyon. They are going to be up there a long time.

We have got the research agency. We have got the organization. And while there are moves for a merging, let us say, of EPA, NOAA and everything else, I think really what we ought to try to do is take the cards dealt us and do the best we can to impress on the administration that there are some priorities and that we can do better by way of education. I can bring 330,000 troops home from Europe—I mean families—leave all the troops there. If I go to Korea, I get one year unassigned. If I go to Okinawa, I get one year unassigned. If I am a British troop in NATO, I get one year unassigned.

But if I am an American troop, I go two to three years with family, and when I go over to look at them, they are telling me how wonderful they are doing on water lines, sewer lines, libraries and bowling alleys. And it does not wash. We come 45 years after World War II, an object of disaffection rather than support.

So we can save a lot of money and put it in the right places. We need to have good oversight, as Senator Stevens says, on your department. We can do it with the committee and the ocean policy study.

And I wish you would start looking in that vein towards the needs of NOAA so that we can update. We do not want to lose the first class scientists. We are losing the research residences at the National Institute of Health. We cannot get anybody over there, and in the scientists and other divisions of government. We want to be sure we can pay them and get them in your department.

I think you will do a lot to help us attract them there, and if we have a need—you see, they have not been able to come forth with any of those needs at all, because it was either the Secretary or the OMB that said do not even ask for it. That is why we have had difficulty with the oversight, because the average NOAA administrator has been chosen because he could keep his mouth shut.

I hope you will get excited, and berate us, and charge us, and confront us, and fuss at us so that we can get something going over there in NOAA.

Dr. KNAUSS. One of the advantages of coming out of a university background, sir, is that many of us talk a lot on a variety of subjects.

The CHAIRMAN. Very good. I am going to listen and be sure I hear you. And we do appreciate it, Senator Stevens.

We will leave the record open. We have got a lot of good questions with respect to the various weather satellites. The fleet itself—the NOAA fleet—has had to be cut back, and the other endeavors of your department, such as the fisheries, as you know, the Secretary had to spend the last 10 days in the turtle nets. And if you can get him out of the turtle nets so I can get him up here on technology. You ought to be able to handle that down at your level, so that he can come up and talk about the opportunities that we have for technological development.

We appreciate it very much. We hope to bring up your appointment at our markup tomorrow and report it to the floor for confirmation before we leave this weekend.

Have you got any other questions, Senator?

Senator STEVENS. No thank you, Mr. Chairman.

The CHAIRMAN. Thank you very, very much, Dr. Knauss. We look forward to working with you.

[Whereupon, at 10:30 a.m., the committee adjourned.]

[The following information was subsequently received for the record:]

POSTHEARING QUESTIONS OF SENATOR GORTON AND THE ANSWERS THERETO

1. **Presently, the scientists at the National Marine Fisheries Service report directly to the regional directors. While this has not been a problem in my area of the country, I do feel that it could place the scientists in an awkward position where political manipulation could take place. Do you have any plans to examine the present reporting structure for scientists?**

Sound scientific information and advice is the heart of NOAA's mission. In no place is this more evident than in NOAA's conservation and management programs for living marine resources. NOAA Fisheries is often the primary contributor of data and information to the Regional Councils, however both formal and informal scientific peer review is practiced throughout NOAA.

A Science and Research Director has been established in each region who reports directly to the Regional Director. The Science and Research Director is responsible for ensuring that the science and research needs of relevant fishery management councils are met, as well as fulfilling other scientific and research responsibilities as mandated by relevant legislation. The credibility of our science is of utmost consequence to sound manaement and policy decisions. I will be reviewing the performance of NOAA Fisheries with a particular view to its management structure to ensure that the best scientific advice is reaching decision-makers.

In addition, I will be working with all elements of NOAA to bring together the combined talents and scientific expertise of NOAA to bear on problems and issues. The Science and Research Directors of NOAA Fisheries will play an essential role.

2. **A few weeks ago, during reauthorization hearings on the Magnuson Act in Seattle, several witnesses expressed a belief that NOAA has not been providing the indepth guidance and overview of regional management plans that the Act anticipated. While I think most everyone would agree that the Councils need the independence to develop their own sets of recommedations for regional management plans, the ultimate responsibility for the goals and principles of the Act rests with NOAA. Do you plan a more active oversight role for NOAA in the mangagement plans?**

By and large, my experience is that Council system works. The Councils are the appropriate forum for initiation and discussion of fisheries management issues. Clearly these discussions and subsequent decisions must be made via a proper and legal process, and the operations of our Councils should be beyond reproach. In addition, however, I believe that NOAA thru its Regional Directors, can more vigorously provide guidance in the early portions of the decision making process.

3. **Do you favor a comprehensive observer program to collect scientific and statistical information on fisheries and marine mammals?**

The gathering of relevant fisheries dependent data is one of the keys to understanding and managing the fisheries of the EEZ. The costs of collecting and analyzing fisheries data has increased as the result of the Americanization of the fisheries of our EEZ in the North Pacific and the Bering Sea. I will be anxious to investigate ways to provide a more coherent program of fishery dependent data collected pursuant to the Driftnet Act, the Marine Mammal Protection Act and the Magnuson Fisheries Conservation and Management Act. There is a need for increased cooperation with the States in various commercial/recreation data collection efforts, as well as increased cooperative efforts with foreign countries.

4. **There has been huge growth in the U.S. domestic fisheries which has greatly increased the demands on NOAA and NMFS in terms of management and a greater need for reliable scientific information. NMFS has participated in operations to identify and apprehend foreign fishermen illegally fishing for salmon on the high seas. Much more emphasis needs to be placed in this area as well as on the donut hole. There is a great need to increase these activities to preserve and protect our fisheries resources. Will you fight for increased funding for these high priority areas and for NMFS in general?**

Reliable scientific information and effective enforcement measures are essential if conservation and management goals for living marine resources are to be met. Obtaining the necessary funding for these activities will be a high priority of mine. Greater cooperation with foreign countries in the areas of research, joint projects observers, etc. is necessary and will be a priority effort within NOAA. Within this context, if confirmed, I will be working with NOAA fisheries, the Regional Councils, federal and state agencies and others to ensure that adequate funding proposals are put forth for consideration.

5. The Department of Commerce Inspector General is completing a number of audits on foundations and organizations that have received Saltonstall-Kennedy fisheries grants. The reports allege uniform problems in the conduct of those grants that have not been rasied by NOAA's grant administrators, nor by independent accounting firms retained by grantees. This matter has persisted for some time. Grant applications for S-K funds have domestically dropped. Do you intend to reveiw this matter as a policy issue in evaluating the adequacy of NOAA's grants asministration, or will you deal with each audit on a case-by-case basis?

If confirmed as Undersecretary, I plan to assume an active role in working with the Department's Inspector General to ensure that all NOAA programs are conducted within the legal parameters required to avoid waste, fraud and abuse. As a policy official for oceanic and atmospheric programs, I plan to work with the Administrative Support Center and administrative personnel to ensure that policy and administrative guidance is adequate and uniformly applied to all of NOAA's grant and contractural programs. This of course would include the S-K program. Pending the completion of the ongoing audits and reviews by the Inspector General and any such recommendations that may be forthcoming I will evaluate the need for any policy changes.

6. **I have a strong belief that the conservation and management of our fisheries depends upon the quality of our fisheries science. Beyond the obvious problem of the budget, I am concerned that the organizational structure of NOAA fisheries may not place a high enough priority on science. What are your views on the subject? What can NOAA so to strengthen the fisheries science?**

I agree that management of the Nation's fisheries resources must have a solid scientific basis. It is my understanding that NOAA Fisheries was reorganized just over a year ago. I intend to review the management and operation of NMFS to insure its science programs are strengthened. On a broader scale, I am aware NOAA has developed a Coastal Ocean Initiative which will strengthen research activities of direct relevance to fisheries, as well as increase our understanding of fundamental, underlying oceanographic processes.

7. **One of your major tasks will be to carry out the provisions of the Magnuson Act. We will shortly be considering the reauthorization of this Act. What are your views on the current status of fisheries management? Do you think any changes are needed in the Act?**

I believe our fishery management process is working reasonably well. The Council system established by the Act is basically sound. Accordingly, I do not feel that major changes are warranted at this time. I will be working with NMFS and the Administration to send to the Congress some minor changes that will help facilitate the administration of the Act.

NOMINATIONS—JULY

MONDAY, JULY 31, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The committee met at 2:03 p.m. in room SR-253, Russell Senate Office Building, Hon. Daniel K. Inouye, presiding.

Staff members assigned to this hearing: John Windhausen, staff counsel; Becky Kojm, professional staff member; Ruth Johnson, minority professional staff member; and Gina Keeney, minority staff counsel.

OPENING STATEMENT BY SENATOR INOUYE

Senator INOUYE. The committee meets this afternoon to consider the nomination of Alfred Sikes to be Chairman of the Federal Communications Commission; and the nominations of Sherrie Marshall and Andrew Barrett to be Commissioners at the Commission.

I am happy that we are able to hold this hearing on these nominations, and am hopeful that we can have the full Senate approve all three nominees prior to the August recess.

I know that all members of the committee share my view that the Commission should have its full complement so it can set an agenda and move forward.

There is no question that the positions of chairman and commissioner at the FCC are very important. The communications industry has been among our country's most dynamic, and the FCC has been in the forefront in developing policy.

Over the next few years, the Commission will consider such key issues as advanced television, price caps for local telephone companies and the reallocation of spectrum. It is essential that the Commission be led by individuals who understand both the nature of the communications marketplace and the policy process.

They must understand that successful policy making hinges on ensuring that all views are aired and on developing policies that most all can support.

Over the past eight years, there have been numerous conflicts between the Commission and the Congress, part of this, because of the importance of the communications policy and in part because of the Commission's proposed policies.

I have every reason to believe that future relations between the Congress and the Commission will be more harmonious. I know that the Commission will continue to adapt policy to the changing conditions of the marketplace and the interests of the public.

I also know that the Congress, in exercising its authority over communications policy, will continue to carefully scrutinize proposals and actions of the Commission.

And so I welcome these three nominees here this afternoon. And I also welcome other witnesses who will appear to discuss the qualifications of the nominees. And I look forward to hearing the testimony and answers to questions posed by committee members.

But, before we go and call upon the nominees, may I call upon the distinguished chairman of the full committee, Senator Hollings.

OPENING STATEMENT BY THE CHAIRMAN

The **CHAIRMAN**. Thank you, Mr. Chairman.

I want to thank the Chairman of the Subcommittee, Senator Inouye, and the Ranking Members, Senator Danforth and Packwood, for working to put this hearing together. It is important to get the Federal Communications Commission back on the track. I believe there is a good chance of this occurring with the nominees now before us.

The Congress has always closely followed actions of the FCC. Congress, after all, has the responsibility for developing national communications policy and ensuring that the Commission carries it out. The Commission must follow our lead.

This Congressional interest in Commission actions grew even more intense about over a decade ago. It was clear to all of us that the Commission was making vital policy decisions in uncharted waters. The stakes were great, and further checks on their actions were required. That is why both sides of the aisle decided in 1981 that it was necessary to institute a biennial authorization process.

So, we were already watching the Commission very closely when it began to go off track. The Congress was prepared to be involved in reconsidering Commission proposals, and as all of you well know, we did so. In the past half-dozen years, we have reviewed Commission actions in such areas as financial interest and syndication, acces charges, political broadcasting, minority ownership, children's television, and price caps. Now, not only do parties who feel unfairly treated by the FCC have redress to the U.S. Court of Appeals. They also know that they can come to the Congressional Court of Appeals.

While active involvement by the Congress has brought an important check on Commission actions, I believe Congressional involvement can go too far. We should not be micromanaging the FCC. The Congressional role is to set the overall national communications policy and ensure the Commission acts within reasonable bounds.

I have been often asked whether relations between the Congress and the Commission can be easily repaired. The answer is clearly yes, so long as we believe the Commission is acting responsibly. However, no one should think that Congress will just sit back and take a break. We have our responsibilities, and experience has demonstrated that our oversight role is necessary to ensuring the public interest is protected.

I want to congratulate the President of the United States for the nominations he has made to the FCC. We all know Al Sikes from his tenure at the Department of Commerce. He has an understanding of the policy process as well as the communications marketplace. I look forward to continue working with him.

I also believe the two other nominees, Sherrie Marshall and Andrew Barrett, have the background and temperament to make good Commissioners. I believe they provide the Commission with a good team.

Finally, let me say that there is now one other vacancy on the Commission. This is the so-called Democratic seat. I hope the Administration fills this seat quickly so that the Commission can have the balance intended by the Act and that it can better get on with its work.

Senator INOUYE. Senator Packwood.

OPENING STATEMENT BY SENATOR PACKWOOD

Senator PACKWOOD. Thank you, Mr. Chairman.

Let me apologize to the nominees. At 2:30 this afternoon I have a press conference on a matter of extreme importance to the State of Oregon, involving the sale of public timber, and I cannot stay. But I know two of the nominees quite well and have read the resume of the third and have met the third.

I cannot think of a more exciting time for them to be coming to the Federal Communications Commission. It is one of the few areas of regulation where, by the time you try to make a regulation, technology has outrun the necessity for the regulation or certainly made it obsolete.

And I cannot think of three better people to be put into this position at this time. If they can keep up with technology, they will be whizzes. I doubt if they can, so I hope that they will be appropriately deregulatory.

Senator INOUYE. Are there any other senators desirous of saying something?

Senator GORE.

OPENING STATEMENT BY SENATOR GORE

Senator GORE. Thank you very much, Mr. Chairman.

We have colleagues and we have questions to ask the nominees, and so I will be very brief. But I do want to say these few words. For the past eight years, we have witnessed an almost total dismantling of the federal commitment to common sense regulation of scarce broadcast spectrum. We have even witnessed the FCC abandon reasonable oversight in areas like children's television and media concentration.

While radio and television programmers, both network and cable, exercise fewer and fewer restraints during family viewing and listening hours, we see an FCC apparently determined to eliminate its watchdog role as the final public recourse to these abuses of the airwaves.

As the few conglomerate cable companies grow more and more powerful and aggressively move to stifle competition completely, the FCC gleefully declares that all is well in an industry that is rife with anti-competitive and anti-consumer behavior.

I am hopeful that the nominees before us today will bring a new attitude and a public conscious to an agency that has all but ignored its congressional mandate.

We are going to hear from some witnesses with serious concerns about this administration's commitment to those values, and I urge the nominees to take this criticism to heart.

Thank you, Mr. Chairman.

Senator INOUYE. Thank you.

Senator Kasten.

OPENING STATEMENT BY SENATOR KASTEN

Senator KASTEN. Mr. Chairman, thank you.

I am pleased also that you called this nomination hearing for the President's three nominees for the Federal Communications Commission. And I believe these three individuals are well-qualified to assume the responsibilities as commissioners for the FCC.

So, I am pleased also to hear the chairman of the full committee say that, if things go on schedule, we will be able to have these nominees confirmed tomorrow by the committee, and by the end of the week, by the full Senate. And, in that way, we can have a fully-complemented FCC at work addressing the many problems in the area of communications during the August break.

So, I am pleased with the comments that the chairman has made and look forward to supporting these nominees. And I am also pleased with the expedited procedure.

I thank the chairman.

Senator INOUYE. Thank you.

Now, it is my pleasure to call upon a very important member of this committee, Senator Danforth.

OPENING STATEMENT BY SENATOR DANFORTH

Senator DANFORTH. Chairman Inouye, Chairman Hollings, I especially want to thank you two for this hearing and for your efforts to bring these nominations before the Senate before our adjournment. I do think that it is very important that these positions be filled on the FCC, so that the Commission can go about its very important work.

All of us in the Senate, from time to time, have had opportunities to appear before committees to testify on behalf of nominees from our home states. This, to me, today, is one of the great joys I have had since I have been in the Senate, because Al Sikes is a person whom I have known for so long.

More than 20 years ago, when I, as a very young lawyer became attorney general of our State of Missouri, I went into the attorney general's office that first shocking day, having no idea what was involved in the office. And I went in with, as I recall, four lawyers; two of them are here today with me. One is sitting to my immediate right, and the other is our nominee for the FCC.

Al Sikes served with distinction in the attorney general's office. In 1970, when I ran for the United States Senate for the first time, I asked Al Sikes if he would manage my campaign for the Senate. I trust that the members of the majority party will not hold that against Al Sikes, because the two of us together managed to lose that election to Senator Symington.

And I also hope that Senator Ford will be predisposed toward the nominee, because Al Sikes is a former president of the Missouri Jaycees.

Senator **Ford**. He caught me in the hall and informed me. And I have been for him ever since.

The **Chairman**. I campaigned for Stuart Symington in 1970 in the boot-heel section, and I want to thank Al Sikes for heading up that campaign.

Senator **Danforth**. Mr. Chairman, for 19 years I have been wondering how I lost that campaign, and now I know.

Al Sikes, I think all of us on the committee know him. He has been Assistant Secretary of Commerce for over 3 years now. He has been in charge of communications, in charge of NTIA, in the Commerce Department. One thing that has struck me as his nomination has progressed is the variety of people within the communications area who have made it a point to express their views on Al Sikes to me.

He is, as far as I know, universally highly-regarded for his knowledge of the subject matter, but even more important than that, for his balance, for his sense of fair play, and for his decency. He really is a magnificent nominee for this position, and I am honored to be a part of this hearing.

Senator **Inouye**. Also speaking on behalf of Mr. Sikes is our colleague, Senator Bond.

STATEMENT OF HON. CHRISTOPHER BOND, U.S. SENATOR FROM MISSOURI

Senator **Bond**. Thank you very much, Mr. Chairman.

It is a pleasure for me as well to join with my senior colleague in giving our warmest endorsement to the nomination of Al Sikes.

Prior to the time I had the pleasure of joining Al in working for then attorney general Jack Danforth, I had the somewhat mitigated pleasure of opposing him in Missouri Jaycee politics. Obviously, he was much more successful than my slate of candidates was at that time. And I have found working on the other side and with Al Sikes, it is more fun to work with him.

So, after his trial practice period in 1970, he ran my successful gubernatorial campaign in 1972, learning from the mistakes that had been made in 1970.

The importance that I would put on Al Sikes' experience is that I see I asked him to serve in my first cabinet. And he had the responsibility then of organizing a new department of state government required under reorganization, the department known as Consumer Affairs, Regulation and Licensing. The breadth of that department's responsibilities at the state level is exceeded perhaps only by the breadth of jurisdiction of this committee.

But there, Al Sikes directed a department which was involved in a wide range of regulations, including our public service commission, which handled regulatory matters in communications, transportation and electricity. He also was responsible for economic development activities.

And from that background, he gained an excellent knowledge of how important it is in protecting and promoting the rights and needs of consumers to assure that there was a balance in the system, there was effective regulation, and there was also effective promotion of jobs and growth in our state.

I know that that background that he brings from state government, and his experience and service there, is a very important building block on which his subsequent achievements have been founded. And I would say, in support of what Jack Danforth has already said, that you can be sure that Al Sikes will be hard-working, disciplined. He will manage the affairs under his responsibility very well. He will also be committed to a full and fair hearing for all who appear before him.

And, having watched him work with the Missouri legislature at a time when our relationships between the administration and the legislature were sometimes described as a festering wound, he was committed to full and prompt disclosure of matters of interest to the legislature. I am sure that he will continue to be as accessible to the members of this committee and the Congress as a whole as he has been in the past.

I thank you, Mr. Chairman and members of the committee, for this opportunity to speak on behalf of Al Sikes.

Senator INOUYE. Thank you very much.

Senator Danforth, thank you.

Now, may I call upon Senator Simon, who will speak on behalf of nominee Andrew C. Barrett.

STATEMENT OF HON. PAUL SIMON, U.S. SENATOR FROM ILLINOIS

Senator SIMON. Thank you, Mr. Chairman.

I am pleased to be here and have a few words on behalf of the nomination of Andrew C. Barrett. He is now serving his second term on the Illinois Commerce Commission and is highly regarded by everyone who has seen him in operation there. He is the former assistant director of our state department of commerce and has been active in a variety of other areas.

Two other factors that I think are important on his nomination. One is he has been a real leader in areas that are of concern to minorities. He is not just a token kind of an appointee. He has been active in the leadership of the NAACP, in the Urban League and other areas.

And then, finally, an area that Senator Gore touched on. I have had a chance to discuss this whole question of children's programming and television violence with him, and he is sensitive to this area. I did not ask him for any specific quick solutions. I do not think he has any. But he is sensitive and willing to provide some leadership.

The National Institutes of Mental Health have twice warned us that violence on television is causing serious problems in our society, and I think somehow in this free system of ours, we have to find some answers.

And I do not believe in government censorship, but I agree with Senator Gore that we need some leadership to gently push television—this great instrument of television, to serve us more effectively. And I think Commissioner Barrett will do precisely that.

And I am pleased to be here on his behalf.

Senator **Inouye**. Thank you very much, Senator.

I have just received word that Senator Dixon wanted to be here.

Senator **Simon**. Yes. And I have his statement. And I want to enter it into the record.

Senator **Inouye**. Without objection, it will be made a part of the record.

[The statement follows:]

Statement of Hon. Alan J. Dixon, U.S. Senator From Illinois

Mr. Chairman, I am pleased to be here today to introduce to the committee Mr. Andrew Camp Barrett, who has been nominated to be a member of the Federal Communications Commission.

Andrew Barrett has had a very distinguished career. He is currently serving his second term as a commissioner on the Illinois Commerce Commission. Andrew was appointed to the Illinois Commerce Commission in May of 1980 and has demonstrated only the highest standards of integrity and professionalism since that time. Prior to 1980, Andrew was assistant director for the Illinois Department of Commerce and Community Affairs, and also served for 4 years as director of operations for the Illinois Law Enforcement Commission.

Throughout his life, Andrew has pursued excellence in public service and leadership. He was named as one of Chicago's outstanding young men and has earned many community service and leadership awards. He acted as director for the Chicago NAACP while attending law school at Loyola University. In addition, he has served as a member of the Mid-America Regulatory Conference and the National Association of Regulatory Utility Commissioners.

Andrew will bring to the Federal Commerce Commission not only 10 years of exemplary service with the Illinois Commerce Commission, but a lifetime of dedication to quality and positive public service. I have not doubt that my fellow Illinoisian will continue his outstanding government service as a member of the Federal Commerce Commission.

Senator **Inouye**. Senator Dixon is at this moment assisting in the management of the Department of Defense bill. And so he will not be here, but he sends his endorsement.

Now, it is my pleasure to call upon the senior Senator from North Carolina, who will speak on behalf of nominee Sherrie Marshall.

Senator Helms.

STATEMENT OF HON. JESSE HELMS, U.S. SENATOR FROM NORTH CAROLINA

Senator **Helms**. Mr. Chairman, I noted that Senator Danforth commented that 20 years ago he was a young lawyer; 20 years ago, I was not a young anything.

But I am glad to be here and I appreciate the committee——

I am here to speak, as is Senator Sanford, for this lovely lady in the blue dress.

Sherrie is a North Carolina lady, She grew up in Durham and was graduated from the University of North Carolina and also the UNC Law School. And she has always had an abiding interest in the political process and in government service.

At age 13 she was a page in the North Carolina General Assembly, in the days when the Republican members of the legislature could caucus in a phone booth. Now it takes three phone booths.

She was there, I would say to my colleague, Senator Sanford, at the behest of a very fine Senator from Durham, Claude Curry. Claude was one of the great North Carolinians of our time. And his first perspicacity in selecting pages is evident as you will see when you interrogate Sherrie.

She is extraordinarily well-qualified to serve on the Federal Communications Commission. She has served in the Legislative and the Executive branches. She has worked as a minority counsel for elections to the Senate Committee on Rules and Administration. She has served as a Special Assistant to the President for Legislative Affairs. She has also held the important job of Associate Counsel to the President of the United States.

Now, most senators on this committee already know Sherrie Marshall and have worked with her when she was director of the Office of Legislative Affairs at the Federal Communications Commission. She did a superb job there. She handled, as a matter of fact, very complex and difficult issues in a professional and fair manner. I have never heard any suggestion to the contrary.

Her FCC experience, of course, is an asset and will be as she serves in this important post.

Furthermore, she was a partner in the law firm of Wiley, Rein & Fielding, where she gained a reputation of being a skilled and competent practitioner of the law.

In summary, Mr. Chairman and members of the committee, Sherrie Marshall is an outstanding candidate. She has experience, she has integrity, she has judgment. And I am proud of her and I know her parents, Mr. and Mrs. Clifford Marshall, are proud of her as well.

So, I commend her to this committee, and I thank you again for your courtesy in allowing Senator Sanford and me to appear on her behalf.

Thank you very much.

Senator INOUYE. I thank you very much, Senator.

And now may I call upon the junior Senator, Senator Sanford.

STATEMENT OF HON. TERRY SANFORD, U.S. SENATOR FROM NORTH CAROLINA

Senator SANFORD. Mr. Chairman, thank you, and members of the committee.

And I am pleased to join Senator Helms in presenting this very excellent, outstanding public servant. She is from my hometown. She is from a very distinguished family. And she has had an absolutely remarkable career in a brief period of time.

Senator Helms has already commented on a number of items related to her career. She has held three highly-responsible positions at the White House. She worked for Secretary Baker in the Department of the Treasury. She has served twice with the Federal Election Commission. And, for a year, was minority counsel for elections in the Senate Rules Committee.

I will not carry that back to Senator Curry, who was my close colleague, who served as one of my leaders when I was governor; I do not want to in any way prejudice her position here by pointing up that rather questionable background of working for the Democratic leader.

But maybe she can speak for herself about her Democratic connections. She has proven that she is a dedicated public servant. She has gained the respect of citizens in North Carolina. She has gained the respect of people who have dealt with her in various official positions. She has earned an undergraduate degree and law degree from the University from North Carolina at Chapel Hill, and that alone would have predicted this kind of success.

I am pleased to join in introducing and highly recommending her for this appointment.

Gentlemen, thank you very much.

Senator INOUYE. Gentlemen, I thank you very much.

And now may I call upon the nominees: Mr. Alfred C. Sikes, Ms. Sherrie P. Marshall and Mr. Andrew C. Barrett.

All three have been not only appropriately, but eloquently endorsed by your state senators. In the spirit of expediting the procedure, I would just call upon you without the usual introduction.

Mr. Sikes.

[The biographical sketch and questions and answers follow:]

ERNEST F. HOLLINGS, SOUTH CAROLINA, CHAIRMAN
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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: SIKES (Last) ALFRED (First) C (Other)

Address: 5907 Aberdeen Road
Bethesda, MD. 20817
(Current residence)

Department of Commerce
14th St. & Constitution Ave. N.W.
Washington, D.C. 20230
(Business)

2. Position to which nominated: Chairman, Federal Communications Commission

Date of nomination: June 28, 1989

3. Date of birth: Dec. (month) 16 (day) 1939 (year)

Place of birth: Cape Girardeau, Missouri

4. Marital status: Married

Full name of Spouse: Martha ("Marty") Helen Sikes

5. Names and ages of children:
Deborah S. Mandigo (26)
Christine S. McNary (24)
Marcia Cay Sikes (19)

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
Sikeston High School	9/53-6/57		
Westminster College	9/57-6/61	B.A.	
Univ. of Missouri Law School	9/61-6/64	L.L.B.	

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of employer	Address	Type of work
3/64	12/68	Allen, Woolsey & Fisher	300 S. Jefferson Springfield, Mo.	Assoc. & Junior Partne (Law Firm)
1/69	3/70	Attorney General John C. Danforth	Supreme Ct. Bldg. Jefferson City, Mo	Asst. Attorney General (State Govt.)
3/70	11/70	Campaign Mgr. for Att. Gen. John Danforth in his race for USS	Madison St. Jefferson City, Mo.	Campaign Manager
11/70	2/72	Attorney General John C. Danforth	Supreme Ct. Bldg. Jefferson City, Mo	Asst. Attorney-Gen. (State Govt.)
3/72	11/72	Christopher Bond in his race for Gov. of Missouri	Madison St. Jefferson City, Mo.	Campaign Manager
11/72	1/73	Christopher Bond (Mo. Transition Govt.)	Madison St. Jefferson City, Mo.	Director of Mo. Transition Govt.
1/73	6/74	Mo. Dept. of Community Affairs	301 W. High St. Jefferson City, Mo	Dir., Mo. Dept of Comm. Affairs (State Govt)

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

A/S of Commerce for Communications & Information 1986-Present

Director, Missouri Dept. of Consumer Affairs, Regulation & Licensing (now Mo. Dept of Ec. Development) 1974-76

Director, Missouri Dept. of Community Affairs 1973-1974

Missouri Transition Government 11/72-1/73

Assistant Attorney General 1/69-3/70 and 11/70-2/72

Missouri Organized Crime Task Force 1969-1970

Chairman, Governors Economic Council 1974-1976

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

Consulting or volunteer services rendered: Danforth for Senator; Bond for Governor; Bond for Senator; Emerson for Congress; Coleman for Congress; Antonio for Auditor; Kelly for Auditor; Blunt for Secretary of State; McNary for Governor; Epple for State Senate - all Missouri candidates. Schuster for Senate (KS); Phares for Gov. (Neb.)

Missouri Teachers Association - Sales tax for education.

Memberships: Missouri Republican Committee

National Republican Committee

7. **Employment Record (Contd.)**

FROM	TO	NAME OF EMPLOYER	ADDRESS	TYPE OF WORK
7/74	12/76	Mo. Dept Consumer Affairs, Reg., & Licensing	301 W. High St Jefferson City, Mo.	Director (State Govt)
1/77	10/78	John Mahaffey & Associates	1200 E. Woodhurst Springfield, Mo.	Officer (owned/ operated radio stations)
11/78	2/86	Sikes and Associates	One Corporate Center Springfield, Mo	President (Broadcast acquisition & mgmt. consulting)
3/86	Present	Dept. of Commerce	14th St. & Const. Ave. NW Wash. D.C.	Fed. Government

9. POLITICAL AFFILIATIONS ACTIVITIES (Contd.)

Contributions:

1988	Emerson for Congress	7/88	$500.00
	Danforth for Senate	7/88	$500.00
	Republican National Comm.	8/88	$100.00
	Republican National Comm.	12/88	$100.00
	Floyd for School Board	2/88	$ 25.00
1987	National-Republican Comm.	12/87	$ 50.00
1986	Margaret Kelly State Auditor	2/86	$250.00
	Missourians for Kit Bond	9/86	$250.00
	Missourians for Roy Blunt	1/86	$ 50.00
	Missourians for Kit Bond	6/86	$250.00
1985	Republican National Committee	9/85	$ 50.00
	Missouri Republican Party	1/85	$ 25.00
	State Auditor Margaret Kelly	1/85	$ 25.00
1984	Friends of Bill Emerson	9/84	$1,000.00
	Francke for Congress	4/84	$100.00
	Carrie Francke for Congress	11/84	$ 50.00
1983	Missouri Republican Party	12/83	$ 25.00
	Greene County Republicans	10/83	$ 25.00
	Broaddus Campaign	3/83	$ 25.00
	Friends of Kit Bond	7/83	$100.00
1982	Danforth for Senator	6/82	$100.00
	Re-elect Emerson to Congress Committee	4/82	$200.00
	Danforth for Senator	9/82	$ 20.00
	Missouri Republican Party	10/82	$ 50.00
	Friends of Kit Bond	3/82	$200.00
	Danforth for Senate	10/82	$100.00
	Sedalia Party Committee	7/82	$ 24.00
	Missourians for Jim Antonio	6/82	$ 20.00
1981	Missourians for Blunt	1/81	$ 31.00
	Danforth for Senate	5/81	$100.00
	Missouri Republican Party	10/81	$ 25.00
	Taylor for Congress	10/81	$ 50.00
1980	Bond for Governor	8/80	$100.00
	Emerson for Congress	8/80	$200.00
	Emerson for Congress	9/80	$ 20.00
	Greene County Pachyderm Club	1/80	$ 25.00
1979	Taylor for Congress Committee	11/79	$100.00

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Member, Jefferson City Downtown Rotary Club, Jefferson City, Mo. 1974-1976

Member, Missouri Bar Association, Jefferson City, Mo. 1964-Present
President, Mo. Jaycees; Legal Counsel, Junior Chamber International, Jefferson
City Jaycees, Jefferson City, Mo., Jan. 1969-Dec. 1972; V. P., United States Jaycees
Springfield Jaycees 1964-1968 (1969-1970
Member, Jefferson City YMCA, Jefferson City, Mo. (Est) 1973-1970

Board Member, Springfield Symphony Assn. Springfield, Mo. (Est.) 1982-1986)

Member, Ducks Unlimited, Long Grove, FL. (Est) 1973-Present

Member, Missouri Conservation Federation, Jefferson City, Mo. (Est). 1976-Present

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Westminster College Alumni Achievement Award, Fulton, Mo. 1987

University of Missouri Law Review Board of Editors

Wide assortment of recognitions in connection with Junior Chamber service

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

"Tomorrow's Communications Policies", IEEE Communications Magazine - Jan. 1987

"Regulatory Alternatives: A Report by NTIA", Rural Telecommunications - Winter 1988

"Information Resources: A Nation's Stake in Telecommunications" Telecommunications
Policy, December 1987

"Communications and Competitiveness: The United States in a Global Economy"
Signal Magazine - May 1987
"Meeting Tomorrow's Challenges Through More Efficient and Effective Telecommunications,
Signal Magazine - June 1989

10. Memberships (Contd.)

Member, Chesapeake Bay Foundation, Annapolis, Maryland, Feb 1989 - Present

Board Member, Springfield Council of Churches, Springfield, Missouri

Phi Delta Theta

Phi Delta Phi

Board Member, U.S. Telecommunications Training Institute, Washington, D.C., April 1886-Present

Member, Bethesda-Chevy Chase YMCA, Bethesda, Md.

ALFRED C. SIKES

PRE-HEARING QUESTIONS AND RESPONSES

Mass Media Issues

1. The FCC has stated that it believes there is no longer a scarcity of broadcast spectrum, while the President of the NAB has taken the position that the spectrum is scarce. With whom do you agree?

   I would prefer to characterize the state of the broadcast spectrum as one of limited availability. Due to advanced technologies and FCC policy, however, there has been a substantial increase in the availability of spectrum for new broadcast licenses during the past decade. This, combined with increasing penetration of cable and other media, which are now available to over 80% of all households, has provided the public with a number of new and different options. While the availability of spectrum may be limited, technological advances and new media have given us a greater diversity.

2. On what criteria do you believe the Government should award broadcast licenses? Do you believe that the Commission proposal to award broadcast licenses for full power stations by lottery is consistent with its obligation to ensure that licenses are awarded to the applicant who will best serve the public interest?

   Broadcast stations are licensed to provide valuable services to the public, and I believe, therefore, that it is important that licenses be awarded expeditiously. Once the Commission has decided that an allotment should be made to a particular locale, the license should be awarded as promptly as possible, consistent with such factors as diversity and localism, as well as the character qualifications of the potential licensee. One problem with our existing system, at least as currently administered, is that it deprives the public of service during the inordinately long period required to compare applicants' qualifications. It is important that the Commission examine its licensing process to see if new methods would, on the one hand, reflect important values, while, on the other hand, better serve the public interest. Certainly, a valueless lottery selection system would be unacceptable.

3. Aside from constitutional considerations, do you believe that the Fairness Doctrine is good policy?

   No. As a broadcaster, I saw that the Fairness Doctrine had a chilling effect on the extent to which broadcasters were prepared to editorialize.

4. In its decision to repeal the Fairness Doctrine the Commission indicated that several related policies in addition to the Fairness Doctrine, may be unconstitutional. Do you share that opinion? For example, do you believe that the political editorializing and personal attack rules are constitutional?

   I have not reviewed the Commission's analysis or other analyses on the constitutionality of the political editorializing and personal attack rules and, therefore, have not made a judgment as to their constitutionality.

5. Do you believe that the Equal Time rule is good policy?

   Yes.

6. It is clear that High Definition Television (HDTV) may be the most significant technological development in the broadcast industry in recent years.

   a. Do you believe that a single standard needs to be adopted?

      The Commission is working toward the establishment of a single HDTV standard for terrestrial broadcasting. It is my understanding that it may be necessary to have some transitional standard to achieve this, but our ultimate objective should be a single HDTV standard for terrestrial broadcasting.

b. Do you believe that the nationality of the manufacturers of HDTV technology should be a factor in selecting a standard for HDTV.

> The Commission role is to select the HDTV standard for terrestrial broadcasting that provides the best service in the public interest. It is in the public interest for manufacturers, whether domestic or foreign, to dedicate significant resources toward research and development in the United States. If work proceeds, as it has in the past, toward future generations of television hospitable principally to foreign circumstances, the public interest in this country will be ill-served. The Commission should, therefore, consider the future research and development intentions of system proponents.

7. What are your views on the structure of the broadcast and media industries? What are your views on the consolidation of these industries? What are your views on the FCC's rules limiting multiple ownership of media properties?

The trend has been toward a growing number of voices in the broadcast industry thus furthering diversity and localism. I would like the chance to examine recent developments in the cable industry, but with that caveat, I do not believe that mass media industries are overly concentrated.

Multiple ownership rules should be aimed at assuring diversity.

8. In general, what public interest obligations should be required of broadcasters? In particular should broadcasters have any obligation to serve the interests of the community in which they are licensed?

Broadcasters should and do have an obligation to serve their communities of license.

Broadcasters are currently obligated to serve the programming needs and interests of their community of license, taking into account the kinds of programming provided by other stations in the same community. This obligation is documented by the programs/issues lists that licensees file with the Commission on a quarterly basis. In addition, broadcasters must serve the programming needs and interest of the child audience. Both of these are serious commitments to the broadcaster's community of license. Broadcasters must also maintain a physical presence, through a main studio within their principal community contour. Additionally, broadcasters have obligations with regard to the electoral process including compliance with the equal time rule and provisions of the lowest unit rate regarding election advertising. In addition, broadcasters have other obligations, including cooperation in the emergency broadcast system, compliance with technical standards, and public file requirements.

9. Do you believe that the Commission's policies designed to encourage minority and female ownership of broadcast stations -- the comparative preferences, tax certificate and distress sale policies -- are good public policy? Will you support their continuation?

Policies aimed at ensuring participation by minorities and women in broadcasting are needed. I have not, however, studied the effects of all of the policies currently administered by the Commission. At NTIA, we were quite active in promoting these goals, working with the FCC, Broadcap, and other groups. I will look forward to working with the Congress in finding appropriate ways to continue to help minorities and women.

10. Do you believe that the need for children's programming is currently being met? What action would you propose that the Commission take concerning children's programming? Do you support the bills to limit advertising on children's television programs and to establish an endowment fund for children's programming?

Through various media, a great deal of children's programming is being offered to audiences. Public television has done much in this area. A significant amount of programming is also being supplied by cable. Most notably, the Disney Channel and Nickelodeon provide cable programming focused primarily on the child audience. All of the national networks and virtually every TV station make an effort to serve children's interests. Fox Inc, has also recently announced the formation of a children's network to provide programming to broadcast stations.

Children are an important part of the audience. As I noted in answering another question, broadcasters are currently required to meet the needs and interests of the child audience. In any action it takes, the Commission must also keep in mind, and care for, this special segment of the audience.

I have generally supported Congressman Tauke's bill proposing an antitrust exemption to permit broadcasters to work together for constructive approaches to children's issues. I would also support the establishment of an endowment fund for the production of children's programming.

11. The FCC has proposed to resolve some spectrum disputes through a process of private interference negotiations. Do you believe that this process could be used in a way that satisfies the public interest in addition to the private interests of the parties? Do you believe such private interference negotiations would conflict with the Communications Act statement dictate that licensees do not have a vested property right in the spectrum?

I believe that the concept of interference negotiations could be employed in a way that will promote the public interest, although I can envision how it could also cause problems. On balance, I believe that under certain circumstances and with Commission review of the terms of any such arrangements, interference negotiations should be considered.

As to whether interference negotiations contravene provisions in the Communications Act, I will look carefully at the legality of any action the Commission might take in this regard.

Common Carrier Issues

1. Do you believe that competition in the provision of communications services serves the public interest? Are there any areas where the public would be better served by a monopoly provider?

   As a general principle, competition in communications clearly has served the public interest by making available to consumers a wider variety of services at lower prices than would have been possible under monopoly providers. I believe that current and expected market conditions, including the continuing development and application of new communications technologies, will continue to make competition the best engine for furthering the public interest. Of course, specific market conditions in individual areas may suggest that it might be more economically efficient to rely on a model other than an unconstrained free market.

2. How would you characterize the quality of competition in the long distance industry? the local exchange industry? the international services industry? the enhanced services industry?

   The steady growth of competition has been perhaps the single most important characteristic of virtually all segments of the telecommunications marketplace in recent years. At this point, competition appears quite vigorous in the long-distance industry and in the enhanced services industry for significant business customers. By contrast, although competition is growing in various portions of the local exchange market and the international services markets, and in the provision of enhanced services targeted to small business and residential customers, competition in these markets is more limited at present.

3. **Do you believe that the Commission should actively promote the entry of alternative suppliers? In which of the markets listed in Question 2, do you believe the Commission should seek to promote greater competition? In which do you believe the Commission should consider restraining competition?**

The Commission should continue to promote greater competitive opportunities generally and should also work to make sure developing competitive markets remain open. The Commission should not restrain competition absent some compelling reason to do so or to ensure compliance with an international treaty.

4. **As a general matter, do you believe that common carrier regulation of today's markets should be more strict or more relaxed?**

Structural and technological developments have dramatically changed the telecommunications marketplace in recent years and should continue to distance it from the market conditions that traditionally might have required pervasive common carrier reguation. It is important that the FCC adapt its regulation to these changes to further the public interest to the greatest extent possible. In this task, the Commission's overall goal is not the protection of particular service providers, but the furtherance of the public interest for the benefit of our citizens generally. In reviewing current common carrier regulation in today's markets, it should be a priority to ensure that service providers have the best possible incentives to provide the high-quality services desired by consumers at the lowest possible price.

5. **What areas of common carrier regulation need to be improved?**

I believe that we should consider improving our regulation of common carrier services in a number of areas. Current rate-of-return regulation creates undesirable incentives for carriers to operate their business in ways contrary to the public interest. Also worthy of attention at this point is our regulation of developing competition in the operator services industry, including the practices of alternative operator services companies. FCC regulation of the long-distance market also appears to warrant review to ensure the continued growth of competition for the benefit of the public. In particular, we should seek to ensure that unnecessarily rigid regulatory or other constraints do not unduly hamper the broader development of competition or the unlocking of this nation's communications resources, making them more broadly available to the American economy.

6. **The FCC's rules currently classify AT&T as a dominant carrier subject to more stringent tariff regulation than its non-dominant competitors. Do you believe that AT&T is still a dominant carrier, or do you believe that the market is sufficiently competitive to justify relaxing the regulatory burdens on AT&T? If you believe that the regulations governing AT&T should be relaxed will you commit to relaxing these regulations only after the Commission completes an on-the-record rulemaking proceeding that AT&T is non-dominant?**

The Commission's current regulatory structure for AT&T is an area that I plan to review in detail if the Senate confirms my nomination to the Commission. I am committed to ensuring that the FCC fulfills its statutory obligation of taking any action necessary to further the public interest only after all interested parties have a full opportunity to have their views considered.

7. As head of NTIA, you issued a report suggesting that several telecommunications services should be subject to less stringent regulation including special access services provided by local exchange carriers. Do you continue to hold these views? Will you attempt to implement the recommendations of that study as Chairman of the FCC?

The appropriate level of regulation for special access services warrants further examination. The NTIA report concluded that such services are generally subject to effective competition and may no longer require rate of return regulation. Subsequently, the FCC developed a specific price cap proposal. In view of the extensive record compiled in the FCC's price cap proceeding, it will be necessary to reevaluate the data on special access services and to determine what steps would be in the public interest.

8. During your tenure, NTIA filed a petition before the FCC arguing that the FCC should declare the BOCs provision of information services to be in the public interest in order to create a conflict with the Modified Final Judgment. The petition is still pending before the Commission.

A. Please explain why there is no inconsistency between the petition's recommendation that the BOCs should be permitted to provide all information services and NTIA's later recommendation that the BOCs should not be permitted to provide cable service other than to provide "video dial tone" service.

The NTIA Petition for Declaratory Ruling addressed the FCC's ability to carry out its statutory mandate to implement national telecommunications policies in the public interest. The Petition concluded that the public would benefit from Bell company provision of information services, and that the FCC's ability to further this goal should not be precluded by consent decree restrictions entered under the antitrust laws. The Petition did not, however, directly address the issue of the cable provision; and more to the point, it did not urge repeal of the 1984 Cable Act or related FCC rules.

NTIA subsequently undertook a detailed study of the cable issue. At that point, NTIA issued the recommendation that the Bell companies be permitted to provide "video dial tone." NTIA noted that cable companies are generally precluded by law from providing telephony, and NTIA concluded it would be potentially harmful to allow the local exchange carriers to provide cable on a fully integrated basis. Based on this factual circumstance and the differing focus of the two items in issue, there is no inconsistency between the two recommendations.

B. Do you still believe that a statement by the FCC that the BOCs provision of information services is in the public interest would bring the Communications Act into conflict with the Sherman Act?

The Petition did not allege a conflict between the Communications Act and the Sherman Act *per se*. The Petition addressed the tension between the FCC's statutory mandate under the Communications Act and the role of the district court in implementing the AT&T consent decree -- which represents a particular interpretation of the antitrust laws. A district court judge implementing the antitrust laws is not meant to be the entity establishing national telecommunications policy -- that role is reserved to the the Congress and the FCC under the Communications Act. Neither should the court, without appropriate review, be able to unilaterally frustrate established national telecommunications policy. Should the BOCs provide various information services, moreover, the general antitrust laws would still apply to their activities. Since we filed our petition, the judgment court significantly lessened the overall restrictions on BOC provision of gateway services, electronic mail, voice messaging and electronic white pages, reducing the tension and conflict between the two regimes.

C. Do you plan on being personally involved in ruling on the petition filed by yourself as head of NTIA, or will you recuse yourself from any consideration of that petition?

Given changed circumstances, it would be more appropriate for any action on this issue to be taken in response to a new proceeding rather than the Petition previously filed by NTIA.

9. How well do you believe that the FCC has promoted universal telephone services? At what point will our universal service goals be met? Do you believe that access to information services should become a part of our concept of universal service? Would you support legislation to mandate that all carriers employ geographic rate averaging?

Several Commissions, in concert with the Federal/State Joint Board, have taken actions over a long period of time that have been quite effective in achieving a very high level of telephone service. By their efforts, the goal of ubiquitous telephone service has largely been attained. The concept of universal service, however, is not necessarily static. I would intend to examine the issue of whether our concept of universal service should be expanded to encompass a more universal availability of information services as well as basic voice service, and, if so, the ways and means for accomplishing such an expanded goal.

Geographic rate averaging is an important and valuable concept that I support. I am not sure that all carriers, especially private ones, should be required to rate-average, but I would be happy to work with this Committee and other Members of Congress if legislation is proposed to mandate geographic rate averaging.

10. How active a role should the FCC take in promoting the interests of U.S. companies abroad? Do you believe that the FCC should play a stronger role concerning trade in telecommunications products and services? Or do these functions more properly belong in the NTIA and the USTR? Will you consider forming a special branch within the FCC to coordinate all international functions?

    The FCC needs to assure that its decisions further U.S. domestic and international interests. Its actions certainly should not prove counterproductive to our international interests, and in fact, should be guided in part by the need to improve our international competitiveness. In achieving these objectives the FCC should work closely with the Executive branch. If confirmed by the Senate, I plan to examine how international functions are handled at the Commission and have an open mind as to whether some restructuring is appropriate.

11. What is your view of the ability of COMSAT to represent the interests of the U.S. within Intelsat and Inmarsat? What are the most significant conflicts of interest faced by COMSAT today? How do you believe these conflicts should be remedied?

    Comsat has historically been an effective representative of American interests. As U.S. policies have changed to encourage competition, the potential for conflicts of interest has developed. In a general sense, Comsat has a potential conflict in its role as U.S. Signatory since its commercial interests may lie in having fewer rather than more competitors. Consequently, it is important for the Government to be attentive in its roles as Party to the Intelsat and Inmarsat Agreements and overseer of Comsat's actions as Signatory.

12. Do you support previous proposals to award licenses to operate using the radio frequency spectrum by auction or other competitive bidding proposal?

    I have supported President Bush's proposal to award licenses for some uses of the radio frequency spectrum by means of auctions.

13. Do you support the FCC's decision to reallocate the 220 to 222 MHz band?

I am aware of the concern expressed by the amateur community over the FCC's decision to allocate three megahertz in the 220-225 MHz proceeding to the amateur service on an exclusive basis and two megahertz therein to the land/mobile service to be used for the development of narrowband, spectrum-efficient technologies. Since the amateur community provides valuable public services, particularly in times of emergency, this decision must have been an especially difficult one to make. NTIA, in consultation with the Interdepartment Radio Advisory Committee (IRAC), supported the Commission's proposal to reallocate the 220-222 MHz band to the land mobile service. It was NTIA's view that this reallocation would facilitate the development of narrowband technologies and would provide additional spectrum resources to support commercial operations. I am aware of no reason to think that the Commission decision was erroneous.

If confirmed, I shall be attuned to the needs of the amateur community and look forward to working with the amateur community to address their needs.

STATEMENT OF ALFRED C. SIKES

Mr. SIKES. Mr. Chairman, members of the Committee. I am honored to be here with you today. At the very outset, I would like to thank you, Mr. Chairman, for acting so quickly to schedule hearings. I know that this Committee faces a demanding schedule and so the effort to resolve the nominations to serve on the FCC so expeditiously is especially appreciated.

I would also like to thank you, Mr. Chairman, and others on this Committee for meeting with me after such short notice. To the senators I have not met with, I look forwarding to scheduling meetings soon.

Now Mr. Chairman, with your permission, I would like to introduce two members of my family who are here with me. First of all, I have three daughters. Only one is in town presently. She is 19 and will be a sophomore at the University of Wisconsin next semester. She is Marcia.

Then my wife is particularly gleeful today, because this is her last day of work in Senator Danforth's office—although that is not the reason she is gleeful. Marty has worked with Senator Danforth in his office for three years—my wife, Marty.

Mr. Chairman, I am honored to have been chosen by President Bush to serve on the Federal Communications Commission and to serve, if confirmed, as his designated Chairman. I will also feel privileged if confirmed to have the opportunity to work with you and the members of the Senate Commerce Committee and the Subcommittee on Communications on our Nation's communications policies and law.

Mr. Chairman, I look forward to responding to questions.

[The following information was subsequently received for the record:]

FCC Chairman Alfred C. Sikes' Responses
To U.S. Senator John Breaux's
Confirmation Hearing Followup Questions

Question (1): If we have telephones in about 93% of American homes and we are improving telephone access in rural areas, most would agree that America is at least close to having achieved universal telephone service. Considering global-competitiveness, the interests of domestic consumers, and the interests of the telecommunications industry, (1) what should be major concerns as we encourage the development of a telecommunications industry that will serve American interests in the immediate future and well into the next century?

Answer: The challenge of attaining universal voice telephone service at affordable rates has largely been met. The historically bipartisan commitment to this fundamental goal should be maintained and, to the extent new technologies permit, extended to ensure all Americans have access to telecommunications services. Looking to the future, we face many new challenges. Foremost among them is to ensure that government actions facilitate America's competitive position in an increasingly global marketplace and help promote the quality of life in our society.

Our nation's telecommunications and information resources already play a pivotal role in the economic sector. In the years ahead, the competitiveness of American business at home and in world markets will hinge, to an increasing degree, on the quality and flexibility of our communications and information infrastructure. In addition, our telecommunications and information resources also are enhancing the vitality of our society.

Our ability to maximize the contribution of our telecommunications and information resources will have a direct and substantial bearing on our economic strength and quality of life in the future. Yet, our ability to achieve our goals in this area may be compromised by unnecessary or ineffective government actions. Government arrangements dating from 1934 and passage of the Communications Act may handicap the introduction of new technology, as occurred with cellular mobile telephone and cable television service. Moreover, although the need for our government to speak and act with one voice on telecommunications issues has never been greater, government policy-making and enforcement activities are scattered, uncoordinated and, on occasion, actually in conflict with each other.

Therefore, in the coming years, the FCC must take into account an understanding of how its actions affect our international competitiveness. In order to accomplish this, we must work with the Congress, as well as Executive Branch institutions with international responsibilities, to develop policies that promote our economic and societal well being. Such policies should be geared toward removing barriers to new technologies and competitive services, encouraging innovation and, perhaps most importantly, building and maintaining the world's best telecommunications and information infrastructure. This is the best means of serving American consumers and achieving the broad policy goals established in the Communications Act.

Question (2): Is more competition still a worthy goal, first in local exchange markets, and then in long-distance telecommunications markets?

Answer: Yes. As a general principle, competition in communications has served the public interest by making available to consumers a wider variety of services at lower prices than were available under monopoly conditions. The steady growth of competition has been perhaps the single most important characteristic of virtually all segments of the telecommunications marketplace in recent years. At this point, competition in the provision of telecommunications equipment, interstate long-distance transmission, and enhanced services appears quite vigorous, especially for large users. In contrast, although competition is growing in some segments of local exchange and international services markets, and in the provision of enhanced services targeted to small business and residential customers, competition in these markets is more limited at present.

Current and foreseeable market conditions will continue to be shaped by the development and application of new communications technologies. Under such conditions, competition usually will continue to be the best engine for furthering the public interest. Where specific market conditions in individual areas suggest, however, that competition is insufficient to discipline the market, regulatory intervention may be necessary.

Question (3): What are your expectations of benefits or limitations, if any, of sustained competition in interexchange markets for the consumer, industry competitors, and for America's posture in global competition, respectively?

Answer: There are more companies in the interexchange market today than ever before. Consumer choice among a wide array of telecommunications products and services in this market has never been higher, and prices have continued to decline. The achievement of these benefits largely can be attributed to the adoption of pro-competitive policies, which, among other things, reduced barriers to entry. The continuation and expansion of such policies can be expected to strengthen America's global competitive posture.

Question (4): How important is an FCC clarification of "dominance" to an orderly development of the interexchange telecommunications industry?

Answer: The FCC's regulation of the long-distance market appears to warrant review to ensure the continued growth of competition for the benefit of the public. Under one part of the FCC's regulatory regime, AT&T is classified and regulated as a "dominant" interexchange carrier, while AT&T's interexchange competitors are accorded far less rigorous regulatory treatment. The Commission's current regulatory structure for AT&T is an area that I plan to review in detail.

Question (5): As incoming Chairman of the FCC, are you committed to ensuring that regulatory safeguards against predatory pricing are effectively enforced?

Answer: Predatory pricing is unlawful under the Communications Act as well as our nation's antitrust laws, and I am committed to ensuring that appropriate safeguards against predatory pricing are maintained and effectively enforced. Of course, competitive market forces tend to drive prices down toward cost, benefiting consumers. As part of my planned review of the FCC's regulation of the long distance market, I will seek to ensure that the FCC's safeguards are not so rigid as to hamper unnecessarily the continued development of price competition and resulting public benefits.

Question (6): Is there a realistic possibility that over a decade or so of development cellular technology could offer competition to local exchange monopolies?

Answer: Demand for cellular telephone services certainly has undergone explosive growth during the past several years. In view of such demand, some observers of telecommunications trends are predicting that cellular or some other radio technology ultimately could offer a competitive alternative to wireline local exchange carriers. For the foreseeable future, however, current spectrum allocation policies and available technology appear likely to ensure that cellular service complements but does not displace local exchange telephone service in most areas.

Question (7): Are you willing to examine the existing cellular market structure to determine the extent of price competition stimulation, and to see if resale and service competition can be improved?

Question (8): To bring prices down and sustain growth in cellular services, shouldn't the FCC also examine barriers to entry in this field?

Question (9): Can we promote further competition in cellular and still retain the existing two-carrier framework?

Answer: The most promising means of stimulating competition in the provision of cellular telephone service in the near future is to remove regulatory barriers to the application of cellular technology. Historically, regulatory gridlock has been the most significant barrier to entry into the cellular market. This gridlock delayed the introduction of cellular service domestically for far too long, and it has reduced America's ability to compete in the burgeoning world market for cellular service. Regulatory delay also significantly handicapped U.S. electronics manufacturers from developing the new technology.

The Commission has been taking steps that are helping to alleviate regulatory gridlock. Sufficient spectrum has been allocated to establish a two-carrier market framework. I think our immediate efforts should be devoted to filling in this framework by efficiently processing cellular licensing applications, and completing related proceedings. The Commission also has initiated a proceeding to examine the competitive impact of resale policies applicable to cellular carriers. I intend to review the record in this proceeding carefully to determine the future course of Commission policy in this area.

The likelihood of further development of cellular technology, which is most evident today in the area of digital cellular technology, holds out the promise of increasing the capacity and capabilities of cellular systems to respond to increasing demand with a wider array of service, within existing frequency allocations. The combination of technological innovation and growing subscribership also should cause prices for service and subscriber equipment to continue to decline. We must encourage the further development of cellular technology, as well as be receptive to innovative applications of such technology.

Question (10): I believe we allowed cable operators compulsory licenses to retransmit off-air signals for about 15 years. We encouraged cable TV's expansion and revenue production capabilities. In the interest of more efficiently serving rural consumers, and in the interest of encouraging the development of a technology with potentially broader future applications, what should be the FCC's role in developing similar growth opportunities for DBS?

Answer: When space satellite communications first became a serious regulatory issue for the Commission, it adopted a so-called "open skies" policy which involved open entry and relatively flexible technical and economic regulations. This policy was successful in creating an environment in which rapid developments in space communication could occur. In adopting rules and policies to govern the introduction of direct broadcast satellite services, the Commission has similarly sought to provide potential service providers with maximum freedom to respond to the changing economic and technical environment. It has done, and continues to do this, by constraining technical configurations only to the extent necessary to meet international obligations and by permitting the maximum flexibility for service offerings consistent with the allocation decision. I continue to believe this is a useful way to proceed. I would not recommend any changes, however, that would promote the DBS service at the expense of terrestrial broadcasters who provide a more locally oriented service or other participants in the telecommunications marketplace more generally.

In this regard, the Commission issued a Report in its Docket 87-25 on August 3, 1987, recommending that the Congress consider phasing out the compulsory copyright license even for cable television operations. While I did not participate in the adoption of that Report, it does seem to me that any expansion of the compulsory copyright license should be approached very cautiously because any compulsory copyright licensing process carries with it a strong potential for unfairly skewing the relationships between the participants in the market.

Question (11): [I]s American DBS technology approaching a capability to soon provide a digital HDTV format for simultaneous nationwide DBS transmission?

Answer: It is well established that satellites are capable of transmitting digital signals. Presumably a digital HDTV signal having the right characteristics could be transmitted nationwide by DBS. I understand that various parties are studying all-digital HDTV formats but that their work is still at an early stage. Several parties are developing hybrid analog-digital systems; those seem to be more promising and closer to realization. The fact that digital transmission might be technically possible leaves unresolved numerous complex issues regarding the competitive environment in which such a system would have to operate. For example, a steady supply of programs must be obtained which are sufficiently attractive to persuade viewers to buy HDTV receivers and satellite receiving equipment.

Question (12): Assuming that such transmission is feasible and could be made compatible with any picture format, is it likely that such developments would stimulate a faster resolution of the problems surrounding the development of transmission standards for HDTV?

Answer: The development of HDTV and, in particular, a terrestrial transmission standard is being addressed vigorously by industry. The various parties are also working on the problems of delivering HDTV by cable television and satellite. To a great extent progress among the key elements - production (programming), long haul distribution, local distribution, receivers - is linked and has to proceed fairly uniformly. No one segment can get too far ahead of the others. The prospect of delivery of HDTV signals by DBS within, say, two years would likely act as a competitive spur but it is hard to predict how much of an effect it would have on other developments.

Question (13): I am encouraging you to review the effectiveness of the U.S. Emergency Broadcast System (EBS). In cases of national, regional, or local disasters, do we have effective access to rural households?

Answer: The Emergency Broadcast System (EBS) is a primary means of accessing rural households during national, State or local emergencies. EBS uses the facilities of the multi-billion dollar broadcast/telecommunications industry to provide emergency information to the public.

Rural households would receive national level (Presidential) messages from nearby participating broadcast stations, cable systems and, for rural households with satellite dishes, through satellite reception of broadcast networks and cable channels (such as ABC, CBS, HBO, ESPN, MTV, Weather Channel, etc.).

Rural households receive State or local level emergency warning and information from nearby participating broadcast stations, mostly radio stations. The FCC, the Federal Emergency Management Agency (FEMA), the National Oceanographic and Atmospheric Administration (NOAA) National Weather Service, and the broadcast industry are working together to develop and improve EBS plans at the State and local level to disseminate warnings to the public more effectively. Broadcast stations have activated the EBS over 10,000 times since 1976 for State and local emergencies. Of the 54 States and Territories, 42 have final EBS plans; and of the 581 EBS areas, 467 have final plans. Our long range goal is to complete and update these plans.

Because in general many more people watch television, television is an important component for warning people of potential disaster. However, power outages are likely to accompany a disaster and the public is more likely to have battery powered radio receivers as opposed to battery powered TV receivers. We believe that a well organized local EBS using AM and FM radio stations is the most viable, reliable, and cost effective method of providing emergency information after disaster strikes. We believe that with proper planning it is hard to conceive of a more cost effective system for notifying the public of impending or actual emergency situations.

Question (14): Would additional access to homes in rural areas through small satellite receiving antennae be beneficial in such cases?

Answer: We do not believe that increased use of small satellite receiving antennas in rural areas would significantly increase State or local emergency information in those areas. Home satellite dishes generally receive national level network and cable programming; they would have to be specially equipped to receive local emergency programming from a satellite channel delivering such information. This would be costly.

However, the Weather Channel, a cable programmer originating in Atlanta, does provide some local weather warnings via satellite, but we do not know its audience share among rural viewers. Further, the NOAA National Weather Service (NWS) has begun a satellite weather service through a government contract with Contel. Subscribers pay for a small satellite dish and receiver and pay a monthly charge to receive national, state and local weather information and warnings directly from NWS. Additionally, weather information is directly disseminated to the public through a nationwide network of NWS stations (although special receivers are required).

Question (15): I understand that electromagnetic pulses could disable terrestrial broadcasts capability for communicating with many Americans in, say, a nuclear attack emergency. To supplement the Nation's EBS, would you consider it worthwhile to have nonmilitary commercial DBS satellites hardened against electromagnetic pulses?

Answer: Hardening nonmilitary commercial DBS satellites to Electromagnetic Pulse (EMP) would be very costly. Funding sources or mechanisms would have to be identified. Moreover, this effort would be of marginal value in a nuclear attack scenario as electricity would not be available to many homes to power satellite receiving equipment. Moreover, there would not be sufficient DBS receivers to provide adequate coverage.

Recognizing these limitations, the FCC and FEMA are actively pursuing the Primary Entry Point (PEP) project which equips and hardens (EMP and fallout protection) selected radio broadcast stations in low risk areas to receive directly national level EBS messages for broadcast to the public. FEMA's FY 1990 budget contains $5 million for the PEP project. The PEP system will be used when the broadcast networks and cable satellite facilities are inoperable. Because we believe it is more likely that at least some battery powered radios (including car radios) will be operable after a nuclear attack, this approach appears to be a more practical solution. Equipment and protection provided to stations in the PEP program can also be used for peacetime emergencies. We are concerned about EMP effects on all radio/satellite receiving equipment. Further study of this needs to be done.

Even absent hardening, the Commission recognizes that DBS could be a valuable addition to EBS, especially during the warning phase of a national emergency. We will welcome its participation.

POSTHEARING QUESTION OF SENATOR PACKWOOD AND THE ANSWER THERETO

Question. What do you see as the FCC's role in encouraging emerging technologies? I am told Great Britain is already granting licenses for operation of a new communications system called CT-2 (CAI). Would it be your position that the FCC must study spectrum availability to make room for new technologies like CT-2 and other personal communications networks?

Answer. Under the Communications Act, the Commission is responsible both to promote the larger and more effective use of radio and to encourage and facilitate the provision of new radio technologies and services to the public. Indeed, the Commission must speedily determine whether any new technology or service proposed in a petition or application is in the pulbic interest. See 47 U.S.C. §§ 157, 303(g). Within recent years, the Commission has taken action to foster the development of advanced technology in several services, for instance, the cellular radio service, FM Subsidiary Communications Authority service, private microwave service and General Purpose Mobile Radio service.

The CT-2 service in Great Britain involves a new, but relatively limited, communications service where portable telephones can be used to place, but not receive, calls in certain areas, for example, within an airport terminal. To gain a better understanding of the CT-2 service, the Commission's Office of Engineering and Technology held a CT-2 Tutorial in July, 1989, at which several speakers presented their views of the history and the emerging technology of CT-2. A copy of the Public Notice that announced the tutorial is attached.

We recently recognize the important contribution toward greater commercial efficiency, as well as the overall quality of life, that new radio communications options promise. The Commission is also committed to achieving more effective and innovative use of national radio spectrum resources. At present, however, the Commission has not received a petition for the provision of a personal communications service similar to CT-2 service. Nor has it recevied a request for the adoption of pertinent standards.

If we receive such a petition, you may be assured that we will review it carefully and expeditiously. Parties who are interested in experimenting with communications technologies such as CT-2 may do so under certain of our existing rules. Locating sufficient spectrum for a service like CT-2 will be difficult. The use of spread spectrum technologies within the frequency band that is currently used by Industrial, Scientific and Medical equipment, however, or improved use of the 10 channels that are currently used by cordless telephones might present viable options.

Senator INOUYE. Thank you. May I call upon Mr. Barrett?

[The biographical sketch and questions and answers follow:]

[illegible]

United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Barrett (Last) Andrew (First) Camp (Other)

Address: Apt. 4102
1130 South Michigan Avenue (Current residence)
Chicago, Illinois 60605

Suite 9-100, Illinois Commerce Commission
100 West Randolph Street (Business)
Chicago, Illinois 60601

2. Position to which nominated: Commissioner - FCC

Date of nomination: June 16, 1989

3. Date of birth: April (month) 14 (day) 40 (year)

Place of birth: Rome, Georgia

4. Marital status: Single

Full name of Spouse: N/A

5. Names and ages of children: N/A

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
DePaul University of Chicago	July, 1971 - Feb., 1975	Juris Doctorate	Feb. 14, 1975
Loyola University of Chicago	June, 1969 - Feb., 1971	Masters	Feb., 1971
Roosevelt University	Aug., 1966 - June, 1969	Bachelors	June 16, 1969
North Carolina State University	Jan., 1964 - May, 1965	None	None

7. Employment record: List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

	From	To	Name of employer	Address	Type of work
*1.	May, 1980	Present	Illinois Commerce Commission	Chicago, IL 100 W. Randolph	Utility Regulation
*2.	May 1979	May 1980	Illinois Dept. of Commerce	Springfield, IL 620 E. Adams	Economic Development
*3.	June 1975	May 1979	Illinois Law Enforcement Comm.	Chicago, IL 120 S. Riverside	Law Enforcement Funding
4.	May 1971	Jan. 1975	Chicago NAACP	Chicago, IL 7 E. 63rd St.	Legal, Human & Civil Rights
5.	Sept. 1968	May 1971	Nat'l Conference of Christian and Jews	Chicago, IL 203 N. Wabash	Educational/ Training
6.	Aug. 1966	Sept. 1968	YMCA of Metropolitan Chicago	Chicago, IL 755 W. North Avenue	Educational/ Training

8. Government experience: List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

* The above were full-time positions with the State of Illinois.

1. Roosevelt University - Part-time/Taught Government, Political Science & Public Policy Courses.
2. Loyola University - Part-time/Taught Political Science & Public Policy Courses
3. Member - Mayor School Board Nominating Committee - City of Chicago
4. Member - Governors' Revenue Study Commission - State of Illinois
5. City Colleges of Chicago - Taught Administration of Criminal Justice

9. Political affiliations activities: List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

1. I have served on (Three) Fundraising Committees for the Governor of Illinois
2. I am a member of the National Republican Committee. The State of Illinois Republican Committee.
3. I served on Fundraising Committees (Twice) for the late Mayor Harold Washington of Chicago.
4. I ran as a Delegate (Republican) to the Republican Nat'l Convention in 1988.

I have never had any Fundraisers for myself, nor have I ever held any office in a political organization, although I was involved in the following:

A) Coordinator Congressional District for Reagan-Bush 1980-1984 and
B) Black Republicans for Bush-Quayle and Coordinator for Congressional District.
These were not considered offices nor policy making positions.

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

1. YMCA of Metropolitan Chicago - Board Member & Secretary to the Board.
2. City Colleges of Chicago Foundation - Board Member & Chairman of Executive Committee.
3. Chicago Urban League - Board Member.
4. American Red Cross - Board Member.
5. United Way of Chicago - Member of the Allocations Committee.
6. American Association of Blacks in Energy - Board Member.
7. Mid-America Regulatory Conference (MARC) - President, 1988-1989.
8. Habilitative Systems, Inc. (HSI) - Board Member.
9. University of Illinois School of Medicine Corporate Advisory Board.
10. The Economic Club of Chicago.

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

	YEAR - ORGANIZATION	AWARD
1.	1988 Northeastern Illinois University	President's Meritorious Service Award
2.	1985 Chicago Boys-Girls Club	Community Leadership Award
3.	1983 Chicago Urban League	Community Service Award
4.	1983 Blackbook Business Magazine	Business & Professional Award
5.	1974 Chicago Jaycees	Chicago's Ten Outstanding Young Citizen Award
6.	1972 Coalition for Community Action	Community Service Award
7.	1972 South End Jaycees	Chicago's Ten Outstanding Young Men Award

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

1. The Potential of Fiber Optics to the Home: A Regulator's Perspective - Public Utilitie Fortnightly, 1/19/89.
2. The Future of Local Exchange Competition: The Illinois Experience - Telematics Volume 5, Number 11, 11/89.
3. Bypass: Illinois' Cure for NTS Costs - Telephone Engineer & Management Magazine, 6/15/87.
4. Water The Future Look Brighter - Nat'l Association of Water Magazine, 11/28/84.
5. Simplied Rate Case Procedure for Small Water & Sewer Utilities in Illinois, 11/83.

~~BARRETT~~

MASS MEDIA

1. Q. The FCC has stated that it believes there is no longer a scarcity of broadcast spectrum, while the President of the NAB has taken the position that the spectrum is scarce. With whom do you agree?

A. While my knowledge is limited, at this time, on this particular subject I realize that the radio frequency spectrum indeed is finite.

I think NAB's position related to the desire of terrestrial television stations to offer advanced television, several proposed systems of which would require additional spectrum to deliver improved-quality pictures. The NAB's comment over "spectrum scarcity" referred to the many competing demands for frequencies -- frequencies that could be used for television broadcasting, land mobile communications and a variety of other purposes. ?

I believe the Commission should continue to evaluate policies to see if they still are needed as we enter an era of diversity abundance.

2. Q. On what criteria do you believe the government should award broadcast licenses? Do you believe that the Commission proposal to award broadcast licenses for full power stations by lottery is consistent with its obligation to ensure that licenses are awarded to the applicant who will best serve the public interest?

A. I firmly believe that the Commission has the statutory obligation to make a full, public interest determination whenever it is asked to award a broadcast license, especially where there are two or more parties seeking that license. Thus, I understand some views rather skeptically the suggestion that the Commission employ a "lottery" or some other form of random selection to choose among competing applicants for a new station. While I am troubled over the lengthy period of time it takes for the selection of a winner in a comparative hearing, the best course, I believe, is to reform and improve the existing comparative hearing process rather than abandon it in favor of a spin of a roulette wheel, if it is still in the public interest. ?

In reaching a judgment on this matter, I intend to review the record carefully and familiarize myself with the workings of both the present hearing system and the lotteries which have been employed in other services.

3. Q. Aside from constitutional considerations, do you believe the Fairness Doctrine is good policy?

A. It seems to me that any policy that guarantees the public will be provided more information, not less information, should be abandoned only after an overwhelming showing that it was not working in the public interest.

I think any policy that will provide the public with a diversity of viewpoints is a good policy. There are some who thought that this Doctrine caused broadcasters to do less rather than more controversial programming in order to avoid a dispute with the FCC as to whether they handled a controversial issue correctly. This is a matter that bears careful consideration.

4. Q. In its decision to repeal the Fairness Doctrine, the Commission indicated that several related policies in addition to the Fairness Doctrine, may be unconstitutional. Do you share that opinion? For example, do you believe that the political editorializing and personal attack rules are constitutional?

A. While I am not an expert in this area, it is my understanding that the personal attack and political editorial rules are really corollaries of the Fairness Doctrine; as I understand it, the old Red Lion case that held the Fairness Doctrine constitutional was actually a personal attack rule case. Therefore, it seems that if the courts find the Fairness Doctrine constitutional, these rules would also probably be found to be constitutional. Whether the court finds the Doctrine itself constitutional, I understand, hinges on whether the Court believes that there is information diversity, whether information diversity rather than technical spectrum scarcity is the real issue of concern, and whether the Doctrine may actually chill speech.

It is my understanding that a review is ongoing at the Commission with respect to the political editorializing and personal attack rules in a pending docketed proceeding. I am not familiar with the nature of the record in that proceeding nor have I undertaken the constitutional analysis that would be required to reach a final judgment on whether these rules can survive constitutionally.

5. Q. Do you believe that the Equal Time rule is good policy?

A. I think the idea that political candidates have equitable access to the public through paid or free broadcast time is a good one. I know that some broadcasters are concerned that the burden is on only the electronic communications media. Once again, I think any policy that keeps the public informed through paid or free broadcast is good.

6. Q. It is clear that High Definition Television (HDTV) may be the most significant technological development in the broadcast industry in recent years.

a. Do you believe that a single standard needs to be adopted?

A. It is my understanding that this particular matter is at issue in the ongoing inquiry into advanced television being conducted by the Commission. Therefore, I believe it is prudent to study the record before reaching a final judgment on this issue. It is my tentative view that a Commission adoption of a single transmission standard for terrestrial broadcast would be beneficial.

b. Do you believe that the nationality of the manufacturers of HDTV technology should be a factor in selecting a standard for HDTV?

A. While once again reserving the right to benefit from the extensive record compiled on this matter, I believe that the Commission should select a standard which best serves consumers generally. In reaching this judgment, consideration must be given to matters of quality, cost and spectrum use. It is also plausible that the nation of origin of a particular standard could be a factor in the public interest calculus.

7. Q. What are your views on the structure of the broadcast and media industries? Are you concerned about the increasing consolidation of these industries? What are your views on the FCC's rules limiting multiple ownership of media properties?

A. It seems clear that the Congress has taken a keen interest in the structure of the broadcast industry from the very beginning of communications' regulation. I think the interest of Congress stems from a desire to avoid undue concentration of control of the media in the hands of a few and assuring the American public maximum diversity of opinions. As an FCC Commissioner, I would certainly take note of the concern of the Congress in this area and would therefore have an obligation to take guidance from the Congress. However, I don't believe that these rules and policies, like other rules and policies, should be written in stone and never changed. I believe that these rules should be amended to reflect changes in the competitive marketplace. Therefore, if it appears that one industry is being placed at a distinct competitive disadvantage to another industry, this would warrant examination and possible amendment of the multiple ownership rules. The Commission has reexamined and changed its multiple ownership rules many times in the past with the knowledge and consent of the Congress.

8. Q. In general, what public interest obligations should be required to broadcasters? In particular, should broadcasters have any obligation to serve the interests of the community in which they are licensed?

A. Although I would be troubled, from a policy perspective, over unnecessarily intrusive oversight of broadcast programming, I strongly support the notion of broadcast localism and the theory that stations allocated to serve a particular geographic area provide programming responsive to many of the issues that exist in these areas and are important to the local citizenry. I believe that the renewal of radio and television station licenses should still be premised on the stations' provision of locally-oriented programming, among other program offerings in the public interest.

9. Q. Do you believe that the Commission's policies designed to encourage minority and female ownership of broadcast stations -- the comparative preferences, tax certificates and distress sale policies -- are good public policy? Will you support their continuation?

A. Preliminarily, I would like to note that the Commission is required by statute, in affect, to maintain the existing minority preference policies and I would, of course, comply with that requirement.

I believe that the Commission's minority and female ownership policies are good public policy and I would strongly support their retention.

10. Q. Do you believe that the need for children's programming is currently being met? What action would you propose that the Commission take concerning children's programming? Do you support the bills to limit advertising on children's television programs and to establish an endowment fund for children's programming?

A. The FCC has regarded children as having separate and distinct needs and interests since the mid-1970's. Even though the FCC has reevaluated and somewhat liberalized its children's programming requirements, there is still an obligation for every television licensee to serve the needs and interests of children. While parties on both sides of this issue differ widely as to whether children's programming needs are currently being met, I have not been confronted with evidence that indicates a strong need for further FCC action.

While the FCC's most recent decision on children's programming has been upheld by the federal courts, I am aware of at least on open proceeding dealing with the issue of programming-length commercials during children's programming. I intend to study the evidence in this proceeding when the issue comes before the full Commission.

I know there are currently before the Congress several bills which would place limits on advertising during children's programs. While I have not been confronted with evidence on either side of this issue, I would take note of the fact that the broadcasting industry has apparently agreed to accept the limits, at least on total advertising time proposed by the bills. An endowment fund for children's programming would appear to be a constructive means of promoting children's programming while limiting the intrusiveness of the federal government.

11. Q. The FCC has proposed to resolve some spectrum disputes through a process of private interference negotiations. Do you believe that this process could be used in a way that satisfies the public interest in addition to the private interests of the parties? Do you believe such private interference negotiations would conflict with the Communications Act statement that licensees do not have a vested property right in the spectrum?

A. When the Commission was created in 1934, its first and primary mission was to serve as the "traffic cop" of the spectrum -- to establish technical and allocations standards and insure that stations and the public could enjoy relatively interference-free service. I see no change in the need for the Commission to continue to perform that task -- indeed, with the vast increase in the number and variety of users of the spectrum, that need seems even more acute today.

As such, I would oppose any effort to have the Commission relinquish its role in this area or to have it delegate, absent a strong showing of public interest, in a wholesale fashion, such responsibility to private parties. I recognize that the Commission has proposed that, for AM radio, there be a mechanism under which various radio licensees on the same or adjacent frequencies could agree among themselves concerning changing of interference patterns (including the cessation of one or more broadcast station operations) as a way of reducing overall interference to the AM band. Perhaps in this AM area, where improvement of this service is an appropriate FCC priority, there could be some innovative and dramatic steps taken. However, even where AM is concerned, it should be the responsibility of the FCC rather than private parties to make the ultimate decision as to how the spectrum should be used and by whom.

COMMON CARRIER ISSUES

1. Q. Do you believe that competition in the provision of communication services serves the public interest? Are there any areas where the public would be better served by a monopoly provider?

A. Competition in the provision of communication services has been evolving in the last two to three decades, driven by the dual forces of technological development, and explicit public policy decisions made at the Federal level and in the states. I believe this direction to be in the public interest, as well as inevitable from the standpoint of technological development.

It is extremely difficult to draw a line between so called "competitive" and "monopoly" telecommunication services. The line keeps moving. I believe the public is best served by not attempting to draw rigid lines particularly in the interstate arena.

2. Q. How would you characterize the quality of competition in the long distance industry? Local Exchange industry? The International industry? Enhanced Services industry?

A. The Long Distance industry is competitive particularly in the interstate arena. Long Distance is also very competitive in several states such as Illinois.

The Local Exchange industry has significant competition for access services, primarily at the high end of the market, as well as in switched services, such as Centrex. Other portions of the market such as rural residential and small business have fewer options available at the present time.

In my role as state regulator, I have not been involved in International issues, but my sense is that the marketplace is quite competitive.

The Enhanced Services/Information Services industry is in many ways embryonic, but shows signs of becoming a very competitive marketplace. I, however, am concerned about the availability of these services for the rural customers.

3. Q. Do you believe that the Commission should actively promote entry of alternative suppliers? In which of the markets listed in question 2 do you believe the Commission should seek greater competition? In which do you believe the Commission should consider restraining competition?

A. The Commission should permit entry of alternative suppliers, but should not advantage newcomers in a way that sends distorted economic signals to the marketplace. New entrants should be given a level playing field - not one tilted in their favor.

All markets are potentially competitive. The Commission should permit continuation of the trend of the last two to three decades. States should have an important role to play in the decision making process.

The Commission should always encourage competition. But I am not interested in competition for competition sales.

4. Q. As a general matter, do you believe that Common Carrier regulation of today's markets should be more strict or more relaxed?

A. Regulation should continue to provide oversight in areas of telecommunications where such responsibility is essential. Pricing and service quality would be examples of such responsibility. However, regulation should evolve so that it avoids sending distorting economic signals to the marketplace and avoids providing the wrong incentives to industry.

5. Q. What areas of Common Carrier regulation need to be improved?

A. Regulation needs to keep pace with the telecommunications marketplace. Regulation should provide incentives to promote development of a competitive telecommunications infrastructure and promote economic efficiency, as well as to perform its traditional role of protection to consumers - particularly rural, residential and small business customers who have limited or no choice in their selection of communication services.

6. Q. The FCC's rules currently classify AT&T as a dominant carrier subject to more stringent tariff regulation than its non-dominant competitors? Do you believe that AT&T is still a dominant carrier, or do you believe that the market is sufficiently competitive to justify relaxing the regulatory burdens on AT&T? If you believe that the regulations governing AT&T should be relaxed, will you commit to relaxing these regulations only after the Commission completes an on-the-record rule making proceeding that AT&T is non-dominant?

A. The jury is still out on the dominant status of AT&T. This currently is the subject of an FCC docket. The rules affecting AT&T should be relaxed only after a rigorous examination of the facts of the current rulemaking.

7. Q. How well do you believe that the FCC has promoted Universal Telephone Service? At which point will our service goals be met? Do you believe that access to Information services should become a part of our concept of Universal Telephone Service? Would you support legislation to mandate that all carriers employ geographic rate averaging?

A. The FCC has and must continue to foster Universal Service in this nation. The meaning of Universal Service has continued to evolve since the term was written into the Communications Act of 1934. The FCC should continue to encourage new meanings to this term as technology improves the capability of the public switched network. Commendably, the FCC has recognized the need to provide assistance to those in need through Life-Line and Link Up America programs.

Access to Information Services as well as other features of an intelligent network should be universally available. Public policy needs to be developed to ensure such availability. This does not imply such access would necessarily be free or included in existing service rates.

In some instances, I support the concept of geographic rate averaging. Whether legislation is appropriate falls within the purview of the congress.

8. Q. How active a role should the FCC take in promoting the interest of U.S. companies abroad? Do you believe the FCC should play a stronger role concerning trade in telecommunication products and services? Or do these functions more properly belong in the NTIA or USTR? Would you support the formation of a special branch in the FCC to coordinate all international functions?

A. NTIA has primary responsibility of promoting U.S. interest abroad. Where possible, the Commission should assist in that effort. The Commission should assist and coordinate with USTR and NTIA and other areas of the Executive branch as appropriate.

9. Q. What is your view of the ability of COMSAT to represent the interest of the U.S. within INTELSAT and INMARSAT? What are the most significant conflicts of interest faced by COMSAT today? How do you believe these conflicts should be remedied?

A. As a state regulator, I have not been involved in international satellite issues, nor the role of COMSAT. I would, therefore, prefer not to offer an opinion at this time.

I plan to study these issues at an early date and contribute my view as part of the Commission's ongoing deliberative process.

10. Q. Do you support previous proposals to award licenses to operate the radio frequency spectrum by auction or other competitive proposal?

A. My concern would be that this process may artificially raise the costs of providing service. These added costs would ultimately be charged to the rate payer in the form of higher prices. This "tax" would be very inefficient being that cellular services are a highly demanded elastic good.

11. Q. Do you support the FCC decision to reallocate the 220 to 222 mHZ band?

A. My background is limited in this area, but I am concerned about the concerns expressed by the amateur community. I think we must keep in mind the amateur community's commitment to public service, particularly in times of emergencies.

STATEMENT OF ANDREW C. BARRETT

Mr. **Barrett**. Mr. Chairman, I am pleased to be here. Unlike Mr. Sikes, I did not bring a family. I do not have one, other than my mother and father. I wanted to bring my pup but he has bad travel habits and they do not allow him on airplanes.

But I am extremely pleased and as I have either told you individually or your staff members, I look forward to working with you and I hope at some point in time that what many perceive to have been a combative Commission before, I hope that the three of us will have a good relationship with Congress—the Chairman-designee and I have discussed that one of the first priorities we have to do is to stop some of the combativeness that is real or imaginary and I am extremely honored to have been nominated by the President.

[The following information was subsequently received for the record:]

Posthearing Question of Senator Packwood and the Answer Thereto

Question. What do you see as the FCC's role in encouraging emerging technologies? I'm told Great Britain is already granting licenses for operation of a new communications system called CT–2 (or CAI). Would it be your position that the FCC must study spectrum availability to make room for new technologies like CT–2 and other personal communications networks?

Answer. I believe the FCC does have a role to play in encouraging emerging technologies. One aspect of that role involves studying and helping to make available frequency spectrum for emerging technologies that appear promising and worthwhile. As a new member of the FCC, I look forward to working with the Congress and the public and provate sector to identify, safeguard, and efficiently allocate spectrum, which is one of America's key natural resources.

Congressmen Dingell and Markey have recently taken an important step by proposing the orderly study and review, collection and storage, and thoughtful distribution of a resource that American industry will need if it is to maintain and expand its telecommunications lead through the next century. I think it is appropriate that the proposed legislation indentifies a role for the FCC in developing a plan to ensure the availability of frequency spectrum for emerging technologies.

"CT–2" and "HDTV" are very much in the public eye at this moment, but imagine what other new and exciting specturm-based technologies are waiting to be born in the next ten to twenty years—if we can provide the frequency spectrum. I would add that if we succeed in replenishing our spectrum storehouse through the strategy proposed by Congressmen Dingell and Markey, we wll have to guard against using it indiscriminately. Otherwise, the next time spectrum is needed, none may be available, and American telecommunications prospects could be severely impaired.

Senator **Inouye**. And the very popular Miss Marshall.

[The biographical sketch and questions and answers follow:]

ERNEST F. HOLLINGS, SOUTH CAROLINA, CHAIRMAN

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United States Senate
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
WASHINGTON, DC 20510-6125

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

(If more space is needed, please use attached REMARKS sheet)

A. BIOGRAPHICAL DATA

1. Name: Marshall (Last) Sherrie (First) Patrice (Other)

Address: 110 4th Street, N.E.
Washington, DC 20002
(Current residence)

Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, DC 20006
(Business)

2. Position to which nominated: Member, Federal Communications Commission

Date of nomination: June 16, 1989

3. Date of birth: August (month) 3 (day) 1953 (year)

Place of birth: Jacksonville, Florida

4. Marital status: Single

Full name of Spouse:

5. Names and ages of children: N/A

6. Education:

Institution	Dates attended	Degrees received	Dates of degrees
University of North Carolina at Chapel Hill	1971 - 1974	A.B., English	1974
University of North Carolina School of Law, Chapel Hill, NC.	1974 - 1977	J.D.	1977

7. **Employment record:** List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Name of employer	Address	Type of work
Attached.				

8. **Government experience** List any experience in or direct association with Federal, State, or local governments including any advisory, consultative, honorary or other part-time service or positions.

See Response to Question 7 Attached.

9. **Political affiliations activities:** List all memberships and offices held in or financial contributions and services rendered to all political parties or election committees during the last 10 years.

As a lawyer practicing in the field of Federal election law, I have provided professional legal services to clients of the firm some of whom are political parties and election committees. My services were professional, not political and were not volunteer. I provided volunteer services to the Reagan-Bush Committee in 1984. Also, in 1984 my ex-husband (Paul Cooksey) and I contributed $250 to the Warner for Senate Committee.

QUESTION 7. List all positions held since college, including the title or description of job, name of employer, location of work, and dates of inclusive employment.

From	To	Employer & Address	Title/Job Description
3/89	Present	Wiley, Rein & Fielding 1776 K Street, N.W. Washington, D.C. 20006	Partner in law firm, practicing primarily in fields of election law and international trade
11/88	3/89	Attorney, White House Counsel's Office and Office of the President Elect (NOTE: this was a detail from the FCC)	Attorney, provided ethics and related advice to incoming Cabinet officers and new Presidential appointees.
9/87	1988	Federal Communications Commission 1919 M Street, N.W. Washington, D.C.	Director, Office of Legislative Affairs
12/86	1987	Wiley, Rein & Fielding 1776 K Street, N.W Washington, DC	Attorney, practicing primarily in fields of election law & international trade
10/86	12/86	Ropes & Gray Washington, DC	Attorney, practicing primarily in government relations and government contracts.
1985	1986	Department of the Treasury 15th & Pennsylvania Ave., N.W. Washington, DC	Executive Secretary, principal policy coordinating officer for Secretary James A. Baker, III.
1982	1985	White House Counsel's Office The White House Washington, DC	Associate Counsel to the President, providing legal advice to the President and members of the White House staff.
1981	1982	Office of Legislative Affairs The White House Washington, DC	Special Assistant to the President for Legislative Affairs, represented the President and the Administration on legislative issues pending before the U.S. Senate.

1979	1981	Federal Election Commission 999 E Street, N.W. Washington, DC	Executive Assistant to Commissioner and Chairman, Max L. Friedersdorf; served as chief legal adviser.
1978	1979	United States Senate Committee on Rules and Administration Russell Senate Office Building Washington, DC	Minority Counsel for Elections, provided legal advice to Republican members of the Committee and the Senate on Federal election laws and contests.
1977	1978	Office of the General Counsel Federal Election Commission 999 E Street, N.W. Washington, DC	Attorney, prepared memoranda and other materials relating to enforcement proceedings of the Federal Election Commission.

10. Memberships: List all memberships and offices held in professional, fraternal, scholarly, civic, charitable, and other organizations.

Member of the Bars of the Supreme Court of North Carolina; the Court of Appeals for the District of Columbia; the United States Court of Appeals for the Federal Circuit; and the United States Claim Court.

Member, American Bar Association.

Member, Sigma Sigma Sigma (College Sorority).

11. Honors and awards: List all scholarships, fellowships, honorary degrees, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Member, Holderness Moot Court Bench, University of North Carolina School of Law 1976 - 1977, and its Southern Regional Competition Team 1977.

Outstanding Young Women of America, 1981.

12. Published writings: List the titles, publishers, and dates of books, articles, reports, or other published materials you have written.

None

ANSWERS TO
PRE-HEARING QUESTIONS
FOR
SHERRIE P. MARSHALL

Mass Media Issues

1. **The FCC has stated that it believes there is no longer a scarcity of broadcast spectrum, while the President of the NAB has taken the position that the spectrum is scarce. With whom do you agree?**

There obviously has been a great increase in recent years in the number of broadcast outlets. While this development clearly warrants a significant amount of deregulation, it does not, in my opinion, justify wholesale abandonment of regulations that ensure that broadcasters serve the public interest. Technological factors continue to impose substantial constraints on the number of stations that can be authorized. In these circumstances, I believe that it is important to retain the fundamental requirement that broadcasters carry programs dealing with the principal problems in their communities as well as regulations dealing with such matters as equal time and indecency.

2. **On what criteria do you believe the government should award broadcast licenses? Do you believe that the Commission proposal to award broadcast licenses for full power stations by lottery is consistent with its obligation to ensure that licenses are awarded to the applicant who will best serve the public interest?**

I am skeptical whether lotteries will allow the Commission to fully take into account all the varied public interest considerations relevant to a licensing award decision for full power stations. In my view, the Commission should reform the comparative process by striking a balance between the need to reduce costly delays in the existing process and the need to maintain a system that will promote recognized public interest objectives (such as increased diversity in the form of minority and female ownership).

3. Aside from constitutional considerations, do you believe that the Fairness Doctrine is good policy?

The fundamental principle underlying the Fairness Doctrine was the concept that broadcasters should provide reasonable opportunities for the presentation of contrasting points of view. In my opinion, that concept represents a key element of good journalism policy. In my judgment, however, government enforcement of this policy does not work well and raises significant constitutional issues. Of course, if Congress does legislate in this area, I will work to carry out whatever mandate is established.

4. In its decision to repeal the Fairness Doctrine, the Commission indicated that several related policies in addition to the Fairness Doctrine, may be unconstitutional. Do you share that opinion? For example, do you believe that the political editorializing and personal attack rules are constitutional?

Hopefully, the outcome of Congressional review of the Fairness Doctrine will help to clarify FCC obligations with respect to the Doctrine's so-called "corollary" policies, including those dealing with political editorializing and personal attacks. I know the Commission has requested public comments on those policies. I have not yet reviewed those comments and would like to do so, as well as discuss them with Members of Congress who, as candidates, are directly affected by such policies, before making a definitive decision on their constitutionality.

5. Do you believe that the Equal Time rule is good policy?

Yes. Having previously represented political candidates and worked in political campaigns, I fully appreciate the importance of the equal time rule and support its retention.

6. It is clear that High Definition Television (HDTV) may be the most significant technological development in the broadcast industry in recent years.

a. Do you believe that a single standard needs to be adopted?

b. Do you believe that the nationality of the manufacturers of HDTV technology should be a factor in selecting a standard for HDTV?

The FCC and its Industry Advisory Committee have done an admirable job of preparing for the technical testing that is a prerequisite to standard-setting in this area. Once the necessary testing has been completed, I believe the Commission should adopt a single terrestrial broadcasting standard with appropriate interfaces to other media.

In view of the obvious importance of this technology, I believe it is vital for the Congress, the Executive Branch and the FCC to adopt policies that would ensure a full opportunity for U.S. industry to play a leading role in its development.

7. What are your views on the structure of the broadcast and media industries? Are you concerned about the increasing consolidation of these industries? What are your views on the FCC's rules limiting multiple ownership of media properties?

As a general matter, I believe that FCC ownership rules have played a positive role in promoting media diversity. Obviously, this is especially important at the local level where the rules directly foster diversity in the ownership of competing media outlets. I am also aware of the fact that members of the Senate have increasingly expressed an interest in a broad range of issues relating to media consolidation and multiple ownership. In my opinion, it is appropriate to periodically examine FCC policies in this area to assure that they are appropriate in light of stated Congressional intent and existing marketplace realities.

8. In general, what public interest obligations should be required of broadcasters? In particular, should broadcasters have any obligation to serve the interests of the community in which they are licensed?

As previously indicated, I strongly support retention of the fundamental concept that broadcasters must serve the interests of their local communities. This includes the requirement that they broadcast programs dealing with the problems faced by the people in their service areas. I also support the continued enforcement of other public interest obligations, such as the equal time rule and indecency regulations.

9. Do you believe that the Commission's policies designed to encourage minority and female ownership of broadcast stations -- the comparative preferences, tax certificate and distress sale policies -- are good public policy? Will you support their continuation?

I favor Commission policies that are designed to promote increased minority and female ownership of broadcast stations. To the extent that the courts may block enforcement of some of these policies on constitutional grounds, I will work to find ways to accomplish those underlying policies that will survive judicial scrutiny.

10. Do you believe that the need for children's programming is currently being met? What action would you propose that the Commission take concerning children's programming? Do you support the bills to limit advertising on children's television programs and to establish an endowment fund for children's programming?

While the government cannot mandate "quality" in children's TV programs or serve as a substitute for parental responsibility, the Commission has a responsibility to generally insure that broadcasters are responsive to the special needs of the child audience. In this regard, I support the legislation proposed by Senator Inouye that would provide Federal funding for the development of new educational children's television programs. I also support the provision of adequate funding for the excellent children's shows that are presented on non-commercial stations. With respect to advertising practices, I believe the Commission may have acted precipitously in repealing its 1974 Children's Television Policy Statement which basically reflects my own views on advertising limits. Thus, while I have concerns about legislative proposals requiring FCC consideration of the content of children's programs at renewal time, I am generally supportive of pending legislation which would re-establish limits on the amount of advertising in children's shows.

11. The FCC has proposed to resolve some spectrum disputes through a process of private interference negotiations. Do you believe that this process could be used in a way that satisfies the public interest in addition to the private interests of the parties? Do you believe such private interference negotiations would conflict with the Communications Act statement that licensees do not have a vested property right in the spectrum?

As a general rule, I do not support private negotiations as a means of resolving interference problems. While deregulation and reliance in the private sector are appropriate methods of dealing with many issues, the problem of interference was the fundamental issue that brought about the establishment of radio regulation in 1927. I believe the Congress recognized that the public has a vested interest in the resolution of interference issues and expected the FCC to protect that interest -- not to abdicate decision-making in this important field to private groups. I also believe, however, that the Commission should have a flexible means of addressing these problems and not blindly apply rigid restrictions which might result in limiting, rather than increasing, the public's listening or viewing choices.

Common Carrier Issues

1. Do you believe that competition in the provision of communications services serves the public interest? Are there any areas where the public would be better served by a monopoly provider?

In general, I believe that competition in the provision of communications services serves the public interest. Pro-competitive policies, of course, must ensure that competition is feasible, fair and publicly beneficial. Where experience or special considerations suggest that competition will not meet such criteria, then I believe that full and effective regulation must be employed to protect consumer interests.

2. **How would you characterize the quality of competition in the long distance industry? the local exchange industry? the international services industry? the enhanced services industry?**

Competition in the long distance market is substantial and growing rapidly; however, certain segments are clearly not as competitive as others. In contrast, I am uncertain that local exchange services -- other than discrete niches or specialized services -- are yet subject to effective competition. The international services industry has its own unique competitive problems in which procompetitive U.S. policies confront contrasting approaches of foreign administrations. As a result, competition -- as we use that term in the domestic U.S. context -- is difficult to achieve quickly or unilaterally. Finally, the enhanced services industry, especially for business customers, appears to me to be competitive.

3. **Do you believe that the Commission should actively promote the entry of alternative suppliers? In which of the markets listed in Question 2 do you believe the Commission should seek to promote greater competition? In which do you believe the Commission should consider restraining competition?**

Affirmative procompetitive policies clearly make sense for the long distance market, and I think the FCC has done a good job in moving toward that goal. Local exchange services, of course, generally fall outside the FCC's jurisdiction and such decisions are left to state regulators. Where the FCC has the ability to foster local exchange service competition -- such as in the case of mobile services -- it should do so. The international services industry involves more complex and nettlesome issues. Neither the FCC nor the U.S. can unilaterally impose its will on foreign administrations. Indeed, such effects could prove counterproductive. On the other hand, we can lead by example and work hard to persuade our overseas partners that procompetitive policies serve their own national interests as well. Finally, with respect to enhanced services, the best thing the FCC has done is to keep that industry outside the scope of regulation.

4. **As a general matter, do you believe that common carrier regulation of today's markets should be more strict or more relaxed?**

As a general matter, I believe that common carrier regulation should be tailored to the extent to which effective competition exists in a given market. In such respects, regulation obviously cannot be static, but rather, evolving based upon marketplace realities and real world experience.

5. **What areas of common carrier regulation need to be improved?**

There are several areas where I will want to carefully examine current practices and policies for possible improvements. First, I believe there is a need for clear rules and policies to assist the Common Carrier Bureau in resolving tariff issues. Second, I am deeply concerned about the practical problems of the Bureau staff in handling enormous volumes of applications and issues in a period of extremely limited resources. Third, I would like to ensure that FCC policies affecting the international arena are part of a logical, integrated U.S. approach. Finally, I am particularly interested in looking for ways to extend new technologies and services to rural as well as urban areas.

6. **The FCC's rules currently classify AT&T as a dominant carrier subject to more stringent tariff regulation than its nondominant competitors. Do you believe that AT&T is still a dominant carrier, or do you believe that the market is sufficiently competitive to justify relaxing the regulatory burdens on AT&T? If you believe that the regulations governing AT&T should be relaxed, will you commit to relaxing these regulations only after the Commission completes an on-the-record rulemaking proceeding that AT&T is non-dominant?**

Currently, the FCC classifies AT&T as a dominant carrier. As you know, there have been several proceedings examining this issue. Personally, I see AT&T as facing effective competition in certain services and geographic markets while the extent of competition in other services and geographic markets is less certain. For example, MTS service between New York City and Los Angeles is undoubtedly competitive. In contrast, 800 services may not be fully competitive nor may services to and from remote rural areas -- even in MTS services -- be as robustly competitive as in urban centers. Clearly, though, these issues are ripe for examination in a rulemaking to assess the extent to which changes in regulation of AT&T are now appropriate.

7. **How well do you believe that the FCC has promoted universal telephone service? At what point will our universal service goals be met? Do you believe that access to information services should become a part of our concept of universal service? Would you support legislation to mandate that all carriers employ geographic rate averaging?**

The FCC appears to have made a serious effort to promote universal telephone service goals. Further efforts to achieve Universal Service goals are obviously part of a continuing process of the highest priority. The extent to which access to information services becomes part and parcel of these goals involves technical, economic and jurisdictional issues that would require study on my part. Finally, geographic rate averaging has been a long standing FCC policy for MTS services which I certainly would continue to support.

8. **How active a role should the FCC take in promoting the interests of U.S. companies abroad? Do you believe that the FCC should play a stronger role concerning trade in telecommunications products and services? Or do these functions more properly belong in the NTIA and the USTR? Would you support the formation of a special branch within the FCC to coordinate all international functions?**

The U.S. needs a coordinated approach to telecommunications and trade issues given our important national interests in both fields. The FCC can and should serve as a source of support and assistance to Administration officials with trade responsibilities. Conversely, those officials should provide support and assistance to ensure that the FCC's telecommunications policies are harmonized with important trade concerns. If a special branch in the FCC would promote such essential interaction, I would encourage its formation.

9. What is your view of the ability of COMSAT to represent the interests of the U.S. within Intelsat and Inmarsat? What are the most significant conflicts of interest faced by COMSAT today? How do you believe these conflicts should be remedied?

Since COMSAT's representation of U.S. interests and alleged "conflicts" are the subject of recently initiated litigation, and since I have not had an opportunity to observe COMSAT in its signatory role, I think it would be inappropriate at this point to comment on COMSAT's representation. I would note, however, that, through the "instructional process," the FCC is involved in determining the positions COMSAT will take, and as an FCC Commissioner I hope to be active in that process.

10. Do you support previous proposals to award licenses to operate using the radio frequency spectrum by auction or other competitive bidding proposal?

I know that the use of auctions has been the subject of studies by the FCC and is the subject of pending legislation, and I would like the opportunity to study the various proposals before supporting or opposing any particular proposal. As a general matter, however, I am skeptical about the use of auction procedures in the common carrier areas, especially in circumstances where the use of such procedures might increase the costs of essential services, residential telephone services and services to rural areas.

11. Do you support the FCC's decision to reallocate the 220 to 222 MHz band?

Since the FCC has not yet released its decision (and, thus, I have not had the opportunity to review the Commission's reasoning) and since the decision is still subject to judicial review, I believe it would be inappropriate to comment on the merits. As a general matter, however, I believe that such spectrum decisions -- and the inevitably difficult choice among competing demands for spectrum -- are among the most difficult decisions the Commission makes, and I plan to pay particular attention to these as an FCC Commissioner.

I should note, however, that while Wiley, Rein & Fielding served as counsel to United Parcel Service in this proceeding, I have had no involvement in the proceeding during my tenure at the firm.

STATEMENT OF SHERRIE P. MARSHALL

Ms. MARSHALL. Thank you, Mr. Chairman. It is an honor to come before you today as the President's nominee to be a member of the Federal Communications Commission.

Having served in various capacities in the Federal Government, I know it is a genuine privilege to be involved in government service. I also understand that with that privilege comes a responsibility, and that responsibility is to serve the public interest.

If confirmed, I will bring to that task a commitment to address issues at the FCC in a fair, open-minded and impartial manner. All of us realize that the needs and interests of individual communities across the Nation must be served by electronic communications. We also know that promotion of fair competition in the marketplace is critical.

My philosophy will be to seek and implement communications policies that promote fair competition while ensuring diversity and freedom in the marketplace of ideas.

Now, a lot has been said about the relationship between the FCC and the Congress, and I learned that first-hand when I took over the role as director of legislative affairs in a very difficult time for the FCC. I have to tell you that in my view Congress is the branch of the government that is mandated to make communications policy, and the FCC is mandated to implement that policy.

I look forward to working with this Committee and the Congress in carrying out those tasks and hope that we can forge a true partnership as we address the various and complex issues in the telecommunications industry today.

Thank you for the opportunity to be here. I look forward to answering any of your questions.

[The following information was subsequently received for the record:]

Answers Of
Commissioner Sherrie P. Marshall
To Questions Posed By
Senator John B. Breaux

A. Previous Commissions have, more or less, supported efforts to increase competition in the telecommunications industry. Is more competition still a worthy goal, first in local exchange markets, and then in long-distance telecommunications markets?

Competition in telecommunications is a worthy goal where competition can be fair, feasible and publicly beneficial. In the long distance telecommunications markets, competitive entry has already occurred to the benefit of users. The primary challenge today is refining the ground rules for competition between the dominant carrier -- AT&T -- and its non-dominant competitors. With respect to the local exchange marketplace, I would note that state public utility commissions -- not the FCC -- have the primary role in ascertaining whether competition in such services would be fair, feasible and publicly beneficial. In certain limited areas, such as mobile telecommunications services, the FCC has sought to authorize competition in the past and should continue to do so in the future.

B. What are your expectations of benefits or limitations, if any, of sustained competition in interexchange markets for the consumer, industry competitors, and for America's posture in global competition, respectively?

Sustained competition in the interexchange market benefits consumers through lower rates and increased diversity of service options. Competition benefits the industry through expanded business opportunities and increased rewards for efficiency, productivity and creativity. Competition benefits America's global position by creating a robust telecommunications network capable of supporting improvements in the cost-effectiveness and quality of goods and services produced in this country. The limitations of interexchange competition call for regulatory scrutiny where the marketplace may not attract or support effective competition. For example, such scrutiny might be called for in regard to service to high cost areas, nationwide MTS rate averaging, and special problems related to Alaskan and Hawaiian services. Thus, competition is generally beneficial and should be pursued as a policy, but its limitations must be recognized and effectively addressed.

C. **Continuing with the competition issue, there is much concern as to whether AT&T's market position is still of such dominance that the "de-regulation" allowed AT&T through price caps and tariffs relief is a serious threat to the survival of developing companies. AT&T urges a resolution of the "dominance" question. How important is an FCC clarification of "dominance" to an orderly development of the inter-exchange telecommunications industry?**

I believe that the FCC must carefully examine two central and interrelated questions concerning regulation of AT&T. First, does AT&T possess market power warranting its treatment as a dominant carrier for all or certain of its services? Second, what ground rules should apply to AT&T's pricing of its services based upon such findings about dominance or non-dominance? Timely exploration and resolution of these questions is important for all concerned.

D. **I encourage you as well to review mass media competitive possibilities of Direct Broadcast Satellites (DBS) systems. I believe we allowed cable operators compulsory licenses to retransmit off-air signals for about 15 years. We encouraged cable TV's expansion and revenue production capabilities. In the interest of more efficiently serving rural consumers, and in the interest of encouraging the development of a technology with potentially broader future applications, what should be the FCC's role in developing similar growth opportunities for DBS?**

I believe that Congress dealt effectively with the provision of broadcast network services to home dish owners when it enacted the Satellite Home Viewer Act of 1988. The question of whether there is a need for any further legislative action in the copyright area is obviously one for the Congress to resolve. Nevertheless, I would be pleased to assist the Congress by providing any information that may be helpful in your deliberations. As for actions that the FCC might take on its own, I believe that it is essential for the FCC to maintain policies and procedures that will facilitate the development and introduction of new DBS technologies and services -- including those that might be especially beneficial to rural areas.

E. To follow-up on oral questions raised concerning the FCC's role in encouraging the development of HDTV, is American DBS technology approaching a capability to soon provide a digital HDTV format for simultaneous nationwide DBS transmission?

I understand that Hughes and North American Philips are attempting to develop DBS satellites that would be designed to provide simultaneous HDTV transmissions to the entire country. However, I am not aware of the current status of this project and am not in a position to evaluate the prospects for successful introduction of such a service or the timing of such a development.

F. Assuming that such transmission is feasible and could be made compatible with any picture format, is it likely that such developments would stimulate a faster resolution of the problems surrounding the development of transmission standards for HDTV?

At the present time, it is not clear whether such developments would expedite our efforts to establish transmission standards for HDTV. As you know, unlike Japan and other countries that are seeking to implement HDTV primarily through simultaneous nationwide DBS transmissions, the U.S. has made a substantial commitment to the continuation and improvement of our existing terrestrial broadcasting system. Thus, while the FCC certainly has no plans to inhibit the development of HDTV through any medium, the principal focus of our standard-setting activity is in the field of terrestrial broadcasting (including the development of appropriate interfaces with other media). I believe that this emphasis is warranted in light of our country's longstanding recognition of the importance of broadcast service tailored to the needs of local communities. It also represents a recognition of the fact that, unlike Japan and most European countries, the United States spans multiple time zones. It is doubtful that sole reliance on simultaneous nationwide DBS transmissions would be consistent with the needs of such a large and diverse country as our own.

G. As incoming FCC Commissioners, I am encouraging you to review the effectiveness of the U.S. Emergency Broadcast System (EBS). In cases of national, regional, or local disasters, do we have effective access to rural households?

On the basis of my initial review, I believe that we do have an effective system. In most respects, it is a voluntary system dependent upon the participation of local broadcasters and cable operators and a wide variety of television, cable and radio networks. In addition, certain alerts are also transmitted on the weather radio system operated by the National Oceanic and Atmospheric Administration ("NOAA"). At the regional and local level, broadcasters work with local authorities to develop EBS plans. To be truly effective, however, EBS requires not only the cooperation of government (federal, state, and local) and various electronic media operators, but also public awareness, which may vary from region to region depending on the local efforts that are made to promote EBS and the extent to which it has been used. The FCC should continue to encourage broadcasters to participate in EBS and to work with local and state authorities in increasing public knowledge about EBS. Of course, to the extent that the system is widely used for the dissemination of local and regional emergency information, it will become a more effective means for national emergency communications.

H. Would additional access to homes in rural areas through small satellite receiving antennae be beneficial in such cases?

I certainly do not believe that the emergency needs of rural America should be overlooked. To a certain extent, national EBS information already is available via satellite to rural households who subscribe to certain programming services which are available for direct reception (e.g. CNN, ESPN, CBN, the Disney Channel, The Nashville Network, and others). While budget priorities are properly the province of the Congress, I would question whether a supplemental system would be appropriate in light of the national budget concerns and existing services to rural America which include terrestrial television and our system of radio broadcasting which provides a mix of local, regional, and wide area service in addition to NOAA weather radio. These terrestrial systems should be encouraged and, as direct satellite broadcasting becomes more of a factor in service to rural areas, it, too, should be utilized to supplement, but not to replace, existing services which may be able to address more effectively our local and regional emergency communications needs.

I. I understand that electromagnetic pulses could disable terrestrial broadcasters' capability for communicating with many Americans in, say, a nuclear attack emergency. To supplement the Nation's EBS, would you consider it worthwhile to have nonmilitary commercial DBS satellites hardened against electromagnetic pulses?

Those of us who are charged with regulating communications should continue existing efforts to understand the effects of electromagnetic pulses that would be produced in a nuclear attack and how such bursts of energy can damage communications systems. Such work should primarily be the task of other federal agencies, including the Department of Defense, but with the cooperation of the FCC insofar as civilian communications is concerned. I am aware that efforts have been made to identify certain radio broadcasting stations for hardening, largely at government expense. Before venturing so far as to suggest that the government or the private sector assume costs for hardening DBS satellites, however, I would want to know much more as to the cost and efficacy of such an undertaking and how the effort would fit with the nation's overall defense program in light of current fiscal concerns.

POSTHEARING QUESTION OF SENATOR PACKWOOD AND THE ANSWER OF SHERRIE P. MARSHALL

Question. What do you see as the FCC's role in encouraging emerging technologies? I'm told Great Britain is already granting licenses for operation of a new communications system called CT-2 (or CAI). Would it be your position that the FCC must study spectrum availability to make room for new technologies like CT-2 and other personal communications networks.

Answer. I believe that the Commission should encourage new technologies. In fact, Section 7 of the Communications Act, added in 1983, states that it is "the policy of the United States to encourage the provisions of new technologies and services to the public" and obligates the FCC to determine "whether any new technology or service proposed in a petition or application is in the public interest within one year after such petition or application is filed." I fully support this policy.

As to the CT-2 system, I am not familiar with that particular system and would need the opportunity to study its potential uses and spectrum needs before offering an opinion of that or any competing spectrum needs.

POSTHEARING QUESTION OF SENATOR LEVIN AND THE ANSWER OF SHERRIE P. MARSHALL

Question. What involvement, if any, did you have in the reallocation of the 220-222 MHz frequency band during your employment with both the FCC and the private sector? Please provide the specific details, including any meetings, correspondence or conversations on the subject.

Answer. While Director of Legislative Affairs for the FCC, it was my responsibility to inform the Chairman of Congressional interest in issues pending before the agency. The 220-222 MHz reallocation docket was initiated in February 1987, prior to my employment at the FCC (which began in September 1987). I first learned of the proceeding through Congressional correspondence to the Chairman expressing concerns on behalf of amateur radio operators.

My involvement in the proceeding consisted of: reviewing responses to the Congressional inquiries prepared for the Chairman's signature by the affected FCC Bureaus; conversations with Committee staff on the nature of Congressional interest in the issue; and an agenda review meeting and other internal meetings with the Chairman's staff and the affected Bureau chiefs (Thomas Stanley and Ralph Haller) prior to consideration of the Bureau's reallocation recommendation by the full Commission. To the best of my recollection, my participation in these meetings consisted of advising of the nature and extent of Congressional interest in this issue.

As noted in previous responses to the Committee, although Wiley, Rein & Fielding served as counsel to United Parcel Service in the 220-222 MHz reallocation proceeding, I had no involvement in that proceeding during my tenure at the firm.

Senator INOUYE. Thank you very much. All of us have questions and if we carried them out we would be here for about three weeks, but I would like to ask a few general questions for all three. After this panel we will have a citizens panel, and several of them will be speaking on the matter of indecency and violence on television and I think this is a concern for all members of this Committee also.

Mr. Sikes and other Commissioners, what do you propose to do about indecency and violence on television?

Mr. SIKES. Senator, what I would like to do with your permission is in part answer your question by reading a prepared answer. I certainly anticipated matters with respect to obscenity and indecency and wanted to very carefully state my view.

The Nation's speech certainly influences its moral well-being. Today it is clear that in the media and elsewhere there are people driven strictly by greed. It is our law that when their greed results in an obscene broadcast they are not protected by the First Amendment.

It is also the law today that indecent broadcasting is subject to some governmental action. Jurists, however, differ significantly in judging what is and is not obscene or indecent, and when indecent material can be banned or simply regulated.

As a former broadcaster myself, I always felt and continue to feel broadcasters enjoy unique advantages as a result of the broadcast licenses they receive. In turn, I feel they bear unique responsibilities as well. It is my view that broadcasters should strive to set and meet high standards.

Broadcasts to the home can be directly controlled by an individual consumer only by shutting off the television or radio. Even more troubling is that, with respect to children being exposed to obscene or indecent broadcasts, parents can admonish but do little more.

I cannot prejudge complaints, cases or controversies. It is, however, with this background that I will approach complaints, cases and controversies. Let me add, Senator, that because the question also goes to the issue of violence and children's television, that I supported the bill I think first introduced by Congressman Tauke which would immunize broadcasters, giving them the opportunity to come together and to develop standards.

When I first became a broadcaster in the late 1970s there was something called the NAB Code, and as a broadcaster I subscribed to that code and it set, I think, rather high standards in the area under discussion and I would once again like to see the broadcasters have the opportunity, without fear of action against them under an antitrust theory, to come together and to be able to set higher standards.

Senator INOUYE. Mr. Barrett? Miss Marshall?

Mr. BARRETT. Mr. Chairman, I find it offensive, as all of us do, but I guess the most important point that I would like to keep in mind is that hopefully we always do what we think is right, but it seems to me that what we perceive to be indecent, does not exist in a vacuum, is not on television because there is no market. There is a market for indecency out there to the extent that people are paying and I think we ought to keep that in mind and I find it repugnant and offensive, but somehow we need to keep in mind that there is an America out there that must be interested, otherwise they would not be showing it.

Senator INOUYE. Ms. Marshall?

Ms. MARSHALL. Mr. Chairman, I am committed to vigorous enforcement of the congressional ban on broadcasting indecent programming. I think that regulation is justified in this area because of the pervasiveness of the medium and because of the unique accessibility of children to broadcast programming.

I am aware that constitutional issues have been raised with respect to the indecency ban, and I am aware of court cases pending in the area. I would just like to say that, to the extent that the courts might strike down any part of the indecency ban, I would work to find ways to continue to preclude the accessibility of indecent programming when children are in the viewing audience.

Senator INOUYE. There are many other contentious subjects. I will just ask one more. On the modified final judgment, do you believe that the restrictions on the Bell Operating Company should be lifted? Mr. Sikes?

Mr. SIKES. I guess a short answer to your question is, no, I do not think all the restrictions should be lifted.

I have looked closely at this question as a part of my previous responsibilities. I think it is very hard to sustain bright lines saying what particular companies can and cannot do in an area that is changing so rapidly. I have consequently favored expanded freedom for the Bell Operating Companies in the areas of information services and manufacturing.

But let me say that I think the job which I asked for and which I hope to be confirmed to assume requires a different set of responsibilities than what I have previously enjoyed. To me that set of responsibilities requires that we as a Commission establish safeguards so that, as the Congress sees fit to provide additional freedoms for the Bell Operating Companies, they are precluded from being able to technically or economically discriminate against their competitors.

Senator INOUYE. Mr. Barrett, do you have anything to add?

Mr. BARRETT. Senator, my state has supported lifting some of these restrictions with some concerns in certain areas, but I guess my best answer is from a colleague of yours, of Senator Byrd, who always said "Make haste slowly" and I think you ought to make haste slowly in that area.

Senator INOUYE. Miss Marshall?

Ms. MARSHALL. I tend to agree with my colleagues here. I think any lifting of the MFJ restrictions should be preceded by the implementation of effective safeguards. I know there is legislation pending in the area, and I think it would be useful if the Congress would give the FCC some guidances to what you feel are the appropriate safeguards should you determine to let the FCC get into the area. Safeguards are the key to any lifting of MFJ restrictions.

Senator INOUYE. Thank you very much. Senator Hollings?

The CHAIRMAN. The answer given there by each of the three of you is the answer that is the concern of Congress and I know the temptation for an individual senator facing the judges is to ask and go down the list of various issues, and how would you vote on this issue, that issue and the next issue, and then if it matched up enough with my vote, then I would vote to confirm.

But the truth of the matter is that I think our colleague, Senator Packwood of Oregon, brought it right into focus in a totally mistaken statement. He made the statement that technology has eliminated the need for regulation. Now, as an important Federal Communications Commission Commissioner, you should understand that technology brought about the need for regulation.

We go back to the historic case of Mr. Sarnoff on the top of the Wanamaker Building at the sinking of the Lusitania, and he had a wireless and picked up the signal from the sinking ship and we saved some lives.

Everybody had the technology. So much so, that the technology, so abundant, required regulation. This is one industry—the broadcast industry—that came to the government, the politicians, and said for heavens sakes, regulate us. We have got nothing but jamming. No one can hear anyone else and you have got to bring order out of chaos, which is the 1934 Communications Act.

They came to Secretary Hoover when he was Secretary of Commerce and as a result, over the years, working in a bipartisan fashion, we have had the rules, regulations and even law, and Miss Marshall, as you have indicated, under section—Title 18, section 1464, we have got the provision against obscene broadcasts.

That ragamuffin commission that preceded you said, oh well, you can get obscene from midnight to 6:00 in the morning. Can you imagine grown people coming along with that nonsense? Garbage is garbage, regardless of the time of day.

So it required the Congress last year, what did we do? We said look, you cannot be obscene any 24 hours and we asked them, in a law that we just passed, and I have the copy of it here, to promulgate rules and regulations to forbid obscenity over the 24-hour period.

Over the years—and that is what I really want to ask and get your feel with respect to the policy, Mr. Sikes, do you think you are on there to carry out your policy or the policy of the Congress?

Mr. SIKES. I think I am there to carry out the policy of the Congress.

The CHAIRMAN. How about you, Mr. Barrett?

Mr. BARRETT. I would think as long as the Congress' policy is what I perceive to be in the public interest, I certainly would agree with Mr. Sikes.

The CHAIRMAN. Well now, wait a minute. I might think a law or policy might be not in the public interest, but you just busted your britches, man. You cannot come along with that answer. We cannot have an individual measure of the public policy.

Mr. BARRETT. I would think that any piece of legislation that comes out of either House here, senator, would be in the public interest, and if that is the answer you are seeking my answer is, yes, I would support that.

The CHAIRMAN. Oh yes, it is signed. It is by both Houses and signed by the President, so it is the President and the Congress, the government's policy is what I am getting at. I should better state it than just the Congress, because it is the policy of the President and the three readings in the House, three in the Senate and signed by the President into law. Miss Marshall?

Ms. MARSHALL. I agree you make the policy and we implement it.

The CHAIRMAN. Well, that is not the way they saw it, and that was my concern and that is why we have had such a hiatus over the past three or four years. It got to the point, we just would not confirm anybody.

You see, it is not our commission exclusively. The President has the appointing authority, we have the confirmation. But even the Republican President must appoint a Democratic member. We have had that split.

So it has been a bipartisan one and as an individual I worked with Dean Burch, Dick Wiley and a bunch of Republican chairmen without any trouble over many, many years and it has been working with the Congress that these rules, regulations, policies, were promulgated and instituted and administered over some 41 years, including the Fairness Doctrine.

It worked well. We did not have one case in 12 years, but the individuals thought well, I do not like that. Technology has taken over so we do not need any regulation, they said, and as a result of the cross-ownership rule, the anti-trafficking provision is destroying legitimate broadcasts.

They are buying up stations and selling them within a year. They do that by firing the new staff, building up the profits and turning it over to an unknowing customer, saying this is a moneymaker, I cannot handle it any more.

So the legitimate competition, it has to fill up with, instead of three or four ads during a break, six and seven commercials during a break—clutter—and as a result of the clutter we are turning it off in the evening, in prime time.

So it destroys that. When you come around with the minority ownership provision totally eliminated, no effort made for a minority ownership. Children's television—no oversight. That is why we have a bill for children's television in both Houses right now.

Coming along, here is this magnificent opportunity. The average TV is on seven or eight hours a day in a person's home in America today. England, Japan—our competition—requires four hours of children's television and you know who is producing it? Sesame Street, the American producers.

We have got the production and everything else, we just do not have the policy. The opportunity is there. They are learning. They are smart, and getting smarter and the dumb are getting dumber, because of this fetish of deregulate, deregulate, deregulate.

We heard that about the airlines and now they are sacrificing safety for profits. We are just debating a deregulation bankruptcy of the savings and loan.

Government is necessary, and you are an instrumental part of that government and not only to control, but more than anything else now to look at the international competition.

Ms. Marshall, on high definition television. What about it? have you had any thoughts about that, on international competition there?

Ms. **MARSHALL**. I do. I think it is very important that the FCC, the Congress and the Executive Branch work together to adopt policies that will ensure that U.S. industry is a leader in the development of HDTV technology.

The **CHAIRMAN**. We need a single standard, I guess, for terrestrial broadcasting, and you are the ones to work that out and position the United States so that we can be in a competitive position with Japan and we have measures here to give financial assistance and to try to correlate the research talent that we have in this country and the development talent and the financial resource so that we can play catchup ball.

It is a matter of commerce, as well as communications, that you have an opportunity there and I want to thank the Chairman and the members for their indulgence. I did not want to get in, but when you abandon guidelines for children's television—and let us remember it is the government's policy and that is what you are there to administer, and I just hope you will work along with us because you will not find any more agreeable group to work with than this Commerce Committee. We get along well together and we work things out together and we congratulate Senator Danforth on finally getting you.

Senator INOUYE. I would like to advise the nominees that I believe all of us have questions we would like to submit and we will not be asking for them now, in the spirit of expediting the process here.

I thank you very much, Mr. Chairman. Senator Danforth?

Senator DANFORTH. Mr. Chairman, thank you very much. I do hope that, in submitting questions for the record, members would bear in mind that we do hope to, I think—are we going to vote on this tomorrow?

The CHAIRMAN. I see no reason not to. Unless there is objection, we hope to.

Senator DANFORTH. I would like to ask each one of you for your thoughts, if you have any particular thoughts, on the question of what, if anything, we should do to improve America's competitive position? This is something that Senator Hollings touched upon in his comments.

Clearly, international competition is a topic of great moment in this country and, clearly, the telecommunications industry is one that is deeply involved in it. Senator Hollings mentioned HDTV. The question has been with us for some time, whether we should do something about that.

Should we have our own subsidy program? Telecommunications trade was a matter that was addressed in the 1988 trade legislation. It was in response to the fact that divestiture of our own telephone industry created a market in our country that was not matched by other countries.

Border broadcasting problems with Canada have shown us that even the tax laws can be used with a thumb on the scale with respect to international competition. I am really asking a very broad and general question and for any thoughts.

You certainly do not have to be totally comprehensive in giving your answers. That could take all day. But give us any thoughts at all—whatever you want to get off your chests with respect to the international competition.

Mr. SIKES. Senator, I hope that the AT&T divestiture and the way that was handled has taught us a lesson: that unilaterally removing trade barriers without thought to global trade implications doesn't make much common sense.

It would be my hope that this Federal Communications Commission would act after full consideration of international implications; that we would not simply have a few staff people assigned to worry about international matters, but we, in fact, would have a group of internationalists serving on the Federal Communications Commission and that that would pervade the Federal Communications Commission.

For example, I think that the Commission must expedite new technologies. We held up cellular radio for years and years and years. We could have began much earlier in our domestic market and given an advantage to our domestic manufacturers in their efforts overseas.

I think, in respect to HDTV, it is relevant to communications policies that companies engaged in work involving HDTV and succeeding generations of television locate significant research and development resources in this country. We have seen the HDTV efforts going on principally overseas, and we have seen developments that have, to a large extent, been alien to our embedded investment in television terrestrially in this country.

Essentially, I hope, as one of my principal goals, to see an FCC that is global in its thinking, and that works actively with the Congress, the Department of Commerce, the United States Trade Representative, and the State Department which have some of the principal foreign commercial responsibilities in the Executive Branch.

Senator DANFORTH. Ms. Marshall.

Ms. MARSHALL. You have hit on an area that I think is very important and that I really do want to address while I'm at the Commission. That is the question of international competitiveness in all the areas that we regulate.

In the last 15 years, the telecommunications industry has been the only significant growth sector in the U.S. economy. It has gone from 3 to 5 percent of GNP, I think. That growth has been due, in part, to the exponential growth of the cable industry, but it has also occurred because the U.S. is the main exporter of programs.

And I noticed in the New York Times today on article regarding more opportunities for U.S. exports of programs over in the European markets.

One thing that the Commission needs to pay attention to, for example, is how the 1992 accords in the European Economic Community are going to affect our ability to continue to be a leading exporter of programming.

The Commission should coordinate with the USTR and with the Commerce Department in those areas. We can serve as an important resource, in terms of giving advice on how these developments affect our current regulations, how we should deal with proposed standards and questions on related issues.

These departments should coordinate with us, and we should be a resource for them.

Senator DANFORTH. Mr. Barrett.

Mr. BARRETT. I think, Senator Danforth, that there certainly is a role for us at the FCC to play, but I think it ought to be coordinated, obviously, with the State Department and with the Department of Commerce. And I think we ought to venture into areas where one can possibly increase their revenues, if I may. But I would hope that we would be very careful as they venture into that area, that the industry is not using local ratepayers' money to venture into what we perceive to be international competition.

Senator DANFORTH. Thank you, Mr. Chairman.

Senator INOUYE. Senator Ford.

Senator FORD. Thank you, Mr. Chairman.

I want to echo Senator Hollings' position. And I have given some thought to the past Commission and you now coming on and the future. And I have developed a little statement here, Mr. Sikes. And I just want to give it to you, and no questions, and I look forward to working with you.

One thing many of us here hope is that, under your chairmanship, the relationship between the FCC and Congress will improve, and improve significantly.

It is no secret that things have been pretty bad in the past few years. There has not been much trust or much cooperation. We have been frustrated, and even angry at times. Your record at NTIA gives us much hope for a better relationship.

There are a great many issues in the communications world that need to be addressed, and have not been resolved because of a lack of cooperation between past Commissions and the Congress.

So, in my view, I hope we can get on with those matters. I hope that all issues can be looked at from a fresh and open viewpoint, and that the FCC, working with the authorizing committee, can get on with its work. And I have hope, in listening to you three and looking at the questions and the way you have answered it and what I think I see in you three, I have a great deal of hope that things are going to be turned around.

And I thank you for allowing me to preach a sermon out here.

Senator **Inouye**. Senator Gore.

Senator **Gore**. Thank you very much, Mr. Chairman.

First of all, Ms. Marshall, you alone among your fellow nominees were a part of the FCC that is being widely disparaged here in this hearing today as being unresponsive to both the public and the Congress. What were your duties at the Commission?

Ms. **Marshall**. I came on at the Commission after the Fairness Doctrine. Let me make that clear.

Senator **Gore**. After that fight was over?

Ms. **Marshall**. After that fight was over.

And when I came on, I came on with the responsibility of trying to be the resident pragmatist and to see if we could improve relations with the Congress. Unfortunately, I underestimated just how bad the relations were and the damage that the Fairness Doctrine had done.

I think the one thing that I accomplished when I was there was that we did not surprise you anymore. The Commission tried to at least let the Congress know and be given full, advance notice of what was going to happen before the Commission acted. And I think some of the relationships did improve marginally over time.

So, that was my role there. It was to keep the chairman and the commissioners informed of the Congress' views on the various issues that they were addressing.

Senator **Gore**. Well, you were an aide to Commissioner Patrick and then Commissioner Fowler, is that correct?

Ms. **Marshall**. No. I was only at the Commission from 1987——

Senator **Gore**. All right. Commissioner Patrick.

Ms. **Marshall**. Right.

Senator **Gore**. All right. Do you share his general philosophical view of the FCC's proper role and function?

Ms. **Marshall**. Well, I think some of the answers I have given today have pointed out some differences, in terms of who makes the policy and who implements it. I do share his general view that pro-competitive policies are useful and can benefit consumers. But I think in evaluating pro-competitive policies, you have to measure them by whether they are feasible, whether they can be effective, whether they can benefit consumers and ultimately whether they would serve the public interest. And if they cannot do that, then we need to have full, effective and fair regulation.

Senator **Gore**. Well, let me say this. Both the Democratic and Republican political parties represent broad coalitions of various groups and interests and viewpoints and perspectives. And one of the viewpoints that has been transcendent during the last nine years has been a view of the market as the supreme value and the assertion that market forces, even in the area of broadcasting and the regulation of the electromagnetic spectrum, ought to be trusted as the principal guide. This was kind of the view that I associated with Commissioner Patrick and Commissioner Fowler.

The public interest standard established in the law is different from that.

And, Mr. Barrett, I was a little puzzled by your answer on indecent programming. Because, to my ears, it seemed as if you were saying exactly that same sort of thing that Commissioner Patrick and Commissioner Fowler said when you said, "We have to remember there is a market for indecency out there. We have to keep that in mind."

What do you mean by that? Could you elaborate a little bit on that?

Mr. **Barrett**. Let me give you probably the best example in a little different situation, Senator. It is obvious to me that the use of illegal drugs are, in fact, illegal. But it seems that this city overflows with people who buy it. Drugs are selling in this city because someone is buying them. And that is the same position I take as it relates to that.

As I said, I find what I see on television extremely, extremely disgusting and offensive. But I would suggest to you that the most effective way of doing that, I think, if you find it offensive, of getting it off of this, is how some people and organizations have done, in terms of going to the sponsors of these television programs.

I am not suggesting that I believe it ought to be on television; I am simply suggesting that if there were not a market out there for it, and if there was not viewership out there, I would suggest it would probably not be on television. I find it as offensive as most people do. I find it personally repugnant.

But I just want to make sure that we understand that things do not exist in a vacuum; they exist because someone is willing to buy it. And if there were no people willing to buy it, we would not be sitting here talking about that.

Senator **Gore**. So, you would recommend consumer boycotts against sponsors of offensive programming?

Mr. **Barrett**. No, no, no. I said that has been the most effective tool, it seems to me. I think, if you recall——

Senator **Gore**. Well, do you recommend that? Or do you think that is a good idea or a bad idea?

Mr. **Barrett**. No, I do not want to pass judgment on that. I merely told you what has been effective, it seems to me. And I think you are aware of the group that I am talking about. And they have called me, and they have asked me my feelings about things and I shared that with them. I do not think it is appropriate for me to suggest boycotts in any area.

Senator GORE. Well, you are being nominated to serve on the federal commission that has the legal authority to regulate broadcasting according to the public interest standard; do you think you have a role, do you think the FCC has a role?

Mr. BARRETT. Of course, I do.

Senator GORE. How would you play that role?

Mr. BARRETT. I think we have a role to make some determinations as to what it is that the statute allows us to tolerate. But that is different from the answers that you are reacting to, Senator. I do not think that role is for me to determine; that I can go out and suggest to someone that they boycott a private industry. I do not think that is appropriate, but I certainly view the FCC as having, not an intrusive, but an oversight role in making sure that, in fact, those standards are adhered to.

For example, I do know if people are unhappy with the safe harbor provisions. I do not know where the line is. Do you not show it at all, or do you have something where you say between 5 and 6 you do not show anything? I just do not know, because you are asking me to, number one, make a professional judgment, which I am capable of doing, but what I do not want to do in making that professional judgment is bring to that decision my own biases. I really do not think I should do that. I think I ought to look at the record, I ought to look at what the statute says, and adhere to both. And I will make that decision.

Senator GORE. Well, let me say this. We all realize that there is a tension between the time-honored principle enshrined in the First Amendment, which prevents and must prevent government from dictating content and communications, on the one hand.

And on the other hand, a scarce part of the electromagnetic spectrum that is parcelled out to only a few who agree to broadcast on that spectrum in accordance with the public interest.

If I got a group of investors and put up a television tower here in the Washington, D.C. area, or in Nashville, Tennessee, or in Memphis, Tennessee, or in Knoxville, Tennessee, and sought to direct a VHF television signal, the kind of signal most people watch, on any of the available channels, your Commission would, after an appropriate and short interval, come and force me to stop doing that, because you have already given all of the available channels to someone else.

And if I persisted, you might, as the Commission has done on occasions in the past, take some sticks of dynamite and blow up the broadcasting tower that those investors and I put up. It is all given out already. And you have decided to give it to someone else. And your justification, under the law, for giving it to them instead of another group of investors, is that they meet certain standards.

Now, what is going on today? A constituent contacted me the other day about a broadcast; it was about 9 o'clock in the morning, summer vacation, a radio program aimed at children, where the broadcaster said we are going away for a commercial now, but stay tuned, because when we come back we will have for you the sounds of a live murder.

It turned out that a seven-year-old, a young girl was in her room when her father broke in to murder the mother. And the mother, while she was dying, attempted to comfort the child. You will be all right, you will be all right. And then the father began to stab the child. And she screamed as she lay face down on her bed. Her tape recorder was running under her pillow and recorded the entire event.

And this was broadcast as entertainment.

If somebody else tries to broadcast on the frequency used by that businessman, you will, if necessary, dynamite the tower. And there is a market for what that broadcaster is putting on. It is becoming more and more common because there is a market for it.

Now, you can turn on your television set, you can turn on your radio, and you can watch and listen to material that, before the Reagan Administration, of which this administration is a continuation, before they came into power with "the market is supreme" philosophy, Americans would have thought to themselves, this cannot ever happen in the United States. We will never see that; we will never hear that over the broadcasting airwaves.

Now, obviously, there are forces underway that began long before the Reagan-Bush Administration came into power. But they have bowed down to it. And you come, Ms. Marshall, as a former staff member of that Commission. You come very well recommended, Mr. Sikes. We know and believe in your sponsor here. And, Mr. Barrett, you have the recommendation of two fine senators from your state as well.

But I believe the American people are sick and tired of what is going on. And I am not saying this for the effect of the words magnified in news coverage. I do not care if they report it or not. I am talking to you about it and I am telling you straight from my heart as a parent of four children, I am sick and tired of it. And I believe that parents all across this country are tired of it. And they know there is a way to do it that is consistent with our values and traditions.

And you come in here, as I say, as part of a broad coalition, identified in some instances with the assertion of family values and moral values, et cetera, et cetera. But a coalition that is identified in other respects with the assertion of this philosophical principle, "the market is supreme." There is a market for indecency. And whatever the market says, that is what we ought to go with. Just go with the flow and let them make as much money as they want. Do not bother with the fact that there are children in the audience.

Now, which part of that coalition are you from?

I believe that this business of just sort of schmoozing over the differences in approach, and having one foot in both camps, is no longer viable. And I think that the American people want to see a Federal Communications Commission that enforces the law and enforces the public interest standard.

Children are part of the public. We do not have the public on one hand and all of America's children in some other foreign country. They are part of the public. They do not have the dollars to buy the same volume of products; the advertisers are not as interested in them. And, of course, they have found that you can titillate and you can go to the lowest common denominator. And whether it is explicit or violent, you can attract their attention and get a little, narrow sliver of the market because there is a market for it.

Is it going to be more of the same? Is it going to be more of the same or not? That is really what I want to know.

Mr. Sikes.

Mr. SIKES. Well, let me begin by saying that this whole area has been circumscribed significantly by Supreme Court jurists like Justices Black and Brennan. And I do not think they can be easily categorized as part of some coalition in the Reagan and Bush Administration.

Secondly, as a broadcaster, having one rock radio station, the others not being rock radio stations, I directed my manager to remove vulgar lyrics and to make sure that we not air those lyrics; trying to exercise the responsibility I felt that I owed because I held a public license as a broadcaster.

As a father, I specifically did not take cable television, or at least the tier of cable television that included HBO and MTV, because at that juncture, when it was first offered to me in Springfield, Missouri, I felt that my daughters, all of whom were in their early- to mid-teens, you know, should not be exposed to that.

And so I am simply trying to suggest to you that, in addition to what the government might do, there are additional responsibilities that broadcasters must perform. And there are additional responsibilities that parents must perform.

Now, I do not hesitate to say that I do not like the kind of broadcasting that you have so dramatically illustrated. I think it is outrageous. And I think that broadcasters should once again come together within the framework of an NAB sort of code, which has its historical antecedent, and attempt to control the kinds of broadcasts that might otherwise be circumscribed by judicial opinion.

Senator GORE. Does the FCC have any role?

Mr. SIKES. Absolutely. When it comes to obscene broadcasting, it has a role to vigorously pursue the licensees that air obscene broadcasting, whether they originate it or repeat it. As I indicated, in the area of indecent broadcasting, it has a responsibility there as well. I think the only question is the extent to which the court is going to circumscribe that responsibility and authority.

Senator GORE. Do you see your tenure as a continuation of the approach taken by your immediate predecessors?

Mr. SIKES. Well, I have simply asked, Senator, to be judged by what I do.

Senator GORE. But we have to vote on you before you do. And we have to decide how to vote on the basis of your responses to questions which are put to you in an effort to get some understanding about which philosophical thrust do you represent, or a combination of the two. And your immediate predecessors had one approach. I think the American people have a different approach.

I am running over my time here and I appreciate the Chairman's courtesy. But I want to know whether you see and it is not all the Supreme Court. The FCC has a lot of latitude, a lot of power, a lot of jurisdiction. Your predecessors have said, "We are not going to exercise that jurisdiction because there is a market for indecency and explicitness."

And because they have a right to just make as much money as they can doing it. And if they do not like that, they can watch Nintendo instead. There is plenty of effective competition or the parents can turn it off, never mind the fact that there are 10s of millions of latchkey children in this country.

Never mind the fact that as I said before children are part of the public. And so what I am trying to get from you before the vote on your confirmation is whether or not—I do not want to just wait and take it on faith and then watch what you do. We have done that, all too often, I would submit.

So before the vote I would like to get some indication from you as to whether or not you see your tenure as a continuation of the same kind of approach on this outrageous material that has become so common as the one taken by your immediate predecessors.

Mr. SIKES. Well, I think my statement indicates some divergence of the approach that you have characterized. And I think you will find my actions following very closely my statement, if that is an adequate response.

Senator GORE. Could I hear from the other two, Mr. Chairman, and then I will save further questions for another round, which I hope we will have?

Mr. BARRETT. Senator, I also happen to have seen or heard the program you were talking about and I simply could not believe what I was hearing. And I opened my door and thought it was outside. And I was somewhat shocked. I am not sure what standards the networks or the broadcasters were held to by my predecessors.

I think that when you use the public airway you ought to be held to a higher standard in terms of what it is you put on the public airways. And, in addition to that, I would hope we would have people like the chairman designee Sikes who also felt personally enough about that that he would not allow that kind of programming to go on. So my standards that I expect to adhere to probably are a bit different. I do not know what standards they had. Mine I think, hopefully are higher standards when you use the public networks.

I just think—the public airway. Well I just think that they have a different and higher responsibility.

Ms. MARSHALL. Senator, I think the Commission has a responsibility to ensure that broadcasters are especially responsive to the needs of children in programming. And I think the Commission probably made a mistake in lifting the limits on advertising limits. I know there is legislation pending now in that area.

I think in the area of obscenity and indecency, I have already stated that the Commission should vigorously enforce the congressional ban. And to the extent that the courts might strike down part of the ban, we should look for another way to implement permissible restrictions that serve the legitimate, compelling state interest for regulation in this area.

It has been a matter of coming up with restrictions that the courts keep striking them down, and we will try to keep coming up with a sustainable approach in this area.

Senator GORE. Thank you for your indulgence. Mr. Chairman.

Senator INOUYE. Thank you.

Senator Kasten.

Senator KASTEN. Thank you, Mr. Chairman. Let me first of all associate myself with a number of the views of the senator from

Tennessee, particularly the answer that because there is a market for it out there is simply not an acceptable response to the questions.

I also think, Mr. Chairman, that this hearing has been tremendously important, not from the point of view necessarily of determining the qualifications of the three outstanding individuals before us. I look forward to voting for them and I hope that we are able to expedite this process. But I think the hearing has become a forum for a number of concerns which many of us have had, and in certain cases, kind of pent up. The very first question from the Chairman was a question with regard to the subject of violence and indecency.

This has been a theme coming throughout the hearing today. I think in that way we have served a real purpose, an important purpose.

I have had an opportunity to review some of the testimony from the individuals who are going to appear on the panel after you, and I wanted to use my questioning time if I could to ask you to respond to one or two of the questions which they are raising. Also, my mail and the comments I get from town meetings at home, indicate there is just a great concern out there.

And so I would like to, if I can, just take some of these questions from concerns that they have brought up and ask you to respond to them.

Let me begin by talking about a court decision of July 1988. The Federal Court upheld the indecency enforcement standards, and yet it is said that until this day the Federal Communications Commission has yet to take any action with regard to the indecency standards that it, as a result of that decision, has the right to move on. When you are chairman, will you move to enforce your own indecency enforcement standards against those who violate the law?

Mr. SIKES. Yes.

Ms. MARSHALL. Yes.

Mr. BARRETT. Yes.

Senator KASTEN. Another question that came up regards a commitment to use the powers of the FCC in an active fight against broadcast obscenity and indecency. They are suggesting full implementation of the doctrine of the Supreme Court's 1978 decision, FCC versus Pacifica Foundation, which held that the power of the FCC to restrict indecent material on the air goes beyond materials covered by the legal definition of obscenity as set forth in Miller v. California.

I am not a communications expert and I am not a lawyer. But will you work toward full implementation of the doctrine expressed in that case?

Mr. SIKES. Yes. As I understand, they are saying that the Commission can go beyond obscenity in terms of broadcasters.

Senator KASTEN. Beyond the narrow definition of obscenity in the California case and that there is a broader area that you can work in.

Mr. SIKES. That is correct.

Senator KASTEN. Do you agree that there is a broader area and would you, in fact, work in that broader area?

Mr. Sikes. I think there is. There, of course, is an additional case pending today that I presume will give us a more contemporary view of what the Supreme Court thinks is our authority. The case deals with Senator Helms' legislation regarding the 24-hour ban on indecency.

Senator Kasten. Do you have a response to that question?

Ms. Marshall. I agree with Mr. Sikes. The Pacifica case said that you can ban obscenity. It also said you could go a bit farther. The question of how far you can go in regulating indecency is still evolving in the courts. But I think that you can and should regulate as extensively as possible in this area. The courts will, of course, provide further guidance for us in the pending case regarding the 24-hour indecency ban.

Senator Kasten. Mr. Barrett.

Mr. Barrett. I think if that spectrum is as you describe it, Senator, I certainly think it ought to be expanded.

Senator Kasten. Let me just ask one final question, with reference to presently pending complaints. In different places in the testimony of those appearing after you, there are questions and objections raised to the fact that, evidently, complaints are not being acted upon quickly. But what they are saying is that we ought to have quick and immediate action by your new commission and by you as chairman on presently pending complaints.

First of all, can we be assured of complaint action on pending complaints? Those complaints that are there now. You are going to take over next week, we hope.

Mr. Sikes. I frankly do not know what processes the Commission uses. I will certainly review those. My own view is that matters should be handled promptly. Certainly, in this kind of volatile and contentious and important area, I think that is especially true.

Senator Kasten. Sherrie, maybe with your experience you might have a better knowledge of how big a problem this is. I frankly do not know. I am paraphrasing from three or four different groups of questions here. I do not know how bad the problem is.

Ms. Marshall. I think the problem in acting on such complaints arises when the FCC receives a number of complaints, many of which might include only a snippet of a broadcast. The FCC staff has to get more details to go back in and process such complaints, and I think the staff works very carefully and conscientiously to address these complaints. Then they have to come up to the Commissioners' level.

But the Commission, as I know from when I was there, was committed to reviewing these complaints. These are difficult questions, but I think the next Commission will try to streamline those proceedings. Part of the problem in the existing Commission is that courts have kept changing the lines concerning what you could enforce and what you could not enforce. This left the staff in a bit of disarray.

But I would want to address all complaints as expeditiously as possible.

Mr. Barrett. I know, Senator, I had a smirk on my face, and then I am laughing, because I find this the most difficult place in the world to get a simple answer. I happen to come from a state where, if you call up and you ask a question you will either get transferred to someone at that moment who can answer that question and your verbal complaint will be followed up with a letter.

And I certainly think that somewhere along the line many agency heads and people have lost sight of who it is that they are supposed to protect and respond to, and that is the taxpayers and the public. And I always find that amazing about this town. I certainly will work very hard toward that.

Senator Kasten. I would like to complete this question and then I will conclude. A suggestion is going to be made by one of the witnesses appearing later to have a "rapid action requirement" for all complaints filed such that each complaint must be immediately investigated and suitable action taken within eight months of the filing of the complaint. They suggest that the President or the legislative branch, in an authorization or appropriations bill, could do something like that.

Does that make any sense to you—some kind of immediate action requirement that each complaint must be immediately investigated and suitable action taken within eight months of the filing of the complaint? That is quite a long time.

Mr. Sikes. Certainly that seems to be a length of time more than adequate to proceed from the point that the necessary initial evidence is provided. I have heard what Sherrie Marshall has said that at times the information is extremely sketchy. But to the point that there is a transcript, a tape, you know—whatever it is that forms the evidentuary basis, again, my general view is that eight months is plenty of time.

Senator Kasten. I do not think we are in the process of trying to attach a rapid action requirement today. We hope the rapid action will be on your nominations. I thank you all for your answers. And I particularly thank the Chairman. I think we have had a very, very important hearing today.

It has brought an issue to a new level of understanding. I hope that you will be successful, and I hope you can get a handle on some of these problems with violence and indecency.

Mr. Chairman, thank you.

Senator Inouye. Thank you.

Senator Breaux.

Senator Breaux. Thank you very much, Mr. Chairman. I thank the members of the Commission for being here and I look forward to working with them. I hope you have the same positive attitude in about a year as you have exhibited here today.

I sort of hate moving from the area of obscenity and violence to something so mundane as telephones. But let us talk about that for a while, if we might.

Ms. Marshall, you had said that Congress should make the policy and the FCC should carry it out. I totally agree with that, but yet this weekend we saw another decision by Judge Green with regard to AT&T's ability to enter into information services.

And it seems to me that, more and more, the policy is being carried out and developed not by this Congress, but by an individual or judge, perhaps because we have not made the right policy or have a vacuum in these areas.

What are each one of your thoughts with regards to the Congress making the policy, in particular with regards to those policies that apparently have been established by the modified final judgment, which is now, seemingly, dictating so much of our policy directives? Anybody? Mr. Sikes?

Mr. **Sikes**. Well, I think it was in early 1988, we suggested to the Federal Communications Commission that it should look specifically at the courts which had stated in its administration of the modified final judgment that the Bell operating companies could not provide gateways or voice messaging or electronic mail or electronic white pages, as distinguished from yellow pages.

And so we challenged the court on those items. We challenged the court because we saw that as networks were modernizing internationally, the French network, the German network, the Japanese network, the Canadian network, for examples, that these had become services that were provided as a part of that modernization. And with those services came switching, transmission equipment that was valuable in providing, yet, additional services.

The court, I suspect coincidentally, but nonetheless, the court, shortly after that did modify the information services ban to allow those services that I have mentioned. It is my personal view that the Congress should recapture telecommunications policy in the area of the AT&T consent decree. And that it should, with specific directions to the Commission with respect to safeguards, refer that administration to the Federal Communications Commission. And I hope that the Commission earns the respect that might cause the Congress to feel good about that delegation.

Senator **Breaux**. Mr. Barrett.

Mr. **Barrett**. Senator, I think also, Congress has and should play a major role. As you well know, if you looked at what you are talking about in terms of electronic items this morning and you counted the number of companies that probably are going to be hurt or possibly going to be hurt by that, I think there is certainly is a role, because I think—if I recall there were about seven or eight companies that possibly could be, and I use it in quotes, "squashed" by this kind of decision.

Senator **Breaux**. Ms. Marshall.

Ms. **Marshall**. Well, Senator, I tend to agree with you that the judge may have supplanted Congress in policy-making regarding the MFJ and telecommunications, and I would like to see the Congress reassert its jurisdiction. And I associate myself with the comments of Mr. Sikes regarding Congress giving jurisdiction to the FCC once you have given us some guidance on the appropriate safeguards that you think we should implement in this area.

Senator **Breaux**. I thank all of you for that response. The question just what you just ended with because you said that you thought there should be room for an expanded BOC authority in the areas of manufacturing and information services, if safeguards could be designed.

Now, I guess my question is is it appropriate for Congress to develop the safeguards. Or would it be appropriate, in your opinion, for Congress to say certain activities can take place: FCC, design the safeguards that protect against monopolistic practices?

Can safeguards be devised? It is possible to do that? And is that a role that the Congress should develop or should that be something, in your opinion, that the FCC needs to do?

Mr. **Sikes**. Well, let me try to separate what the Bell operating companies should or should not be free to do from the question of safeguards.

I think it certainly should be the Congress' responsibility, obviously acting with the Executive Branch, to define what the Bell operating companies should or should not be able to do. For example, the Cable Act of 1984 precludes them, to a large extent, from getting involved in cable services.

However, when it comes to two principal areas where there is the potential for predatory conduct, I think it is really going to require a day-to-day operational and adjudicatory responsibility to properly see that those safeguards are maintained. Specifically these areas include: first, technical interconnection in the provision of information services where a lesser quality line than the Bell operating company itself was using or a delayed interconnection could defeat competitors; secondly, cross-subsidization where an operating company might take from the ratepayers' funds and in part fund competitive offering.

Senator **Breaux**. My final short question. Would each of you comment on your position on the Fairness Doctrine, support or opposed?

Mr. **Sikes**. I am opposed to the Fairness Doctrine. I am opposed as a former broadcaster, because I heard, while a broadcaster, many confused as to exactly what their responsibilities were and, consequently it seemed to me, inhibited in being more active in such things as editorializing in the community. And I felt that that caused some limitation on the number of voices on the diversity.

I should, knowing full well the views of both my sponsor and the chairman say, that if the Fairness Doctrine becomes law, certainly I will enforce it.

Senator **Breaux**. Mr. Barrett.

Mr. **Barrett**. I think any policy that provides the public with what I perceive or what they perceive to be diversity is a good policy. I do not know what thinking went into the position that the Commission took on the Fairness Doctrine, but I would suggest to you that had I been there, absent overwhelming, and I do mean an overwhelming, body of evidence, I would not have supported the abolition of that.

Senator **Breaux**. You would not have supported the elimination of it?

Mr. **Barrett**. No.

Senator **Breaux**. Ms. Marshall.

Ms. **Marshall**. I think that the Fairness Doctrine is good journalism policy. I think you run into problems when government tries to get into enforcement of what is fair from one side and what is fair from the other side. This also raises some strong constitutional issues.

So, I have to say that I think the Commission acted reasonably in its decision on the Fairness Doctrine, but I would say that I am confident that this issue will ultimately be decided by the Congress and perhaps the courts. If the Congress does enact the Fairness Doctrine, then I will look for ways to pursue effective enforcement and will enforce it fully.

Senator **Breaux**. Thank you. Thank all of you.

Senator INOUYE. Senator Kerry.

Senator KERRY. Thank you, Mr. Chairman. I would like to focus on a few of the media concentration and diversity issues. We obviously face as many significant issues at this point in time as this committee has confronted in some period of time, and I think it would be important for the record to reflect some views as to those matters.

Mr. Sikes, under your leadership and tutelage, the NTIA put out its major study of the cable television industry, and in that study you concluded that the concentration of ownership within the industry was nearing an anticompetitive level and recommended that the FCC examine that issue very carefully.

Do you believe and do you approach this with a belief that the concentration within the cable industry is even a larger issue now, as significant an issue, and what steps would you direct the FCC to take in order to carry out that NTIA recommendation?

Mr. SIKES. Well, as I understand it, Senator, the FCC has been directed by the Congress to study the cable industry to report back its findings, its conclusions, and its recommendations in the late summer or early fall of next year.

I presume the commission will be looking at rates, horizontal concentration, vertical integration and other related questions. So, certainly it is my intent to see that that study is performed in a comprehensive and factually effective way.

I do not frankly know whether it is, and I just feel like I need to wait and see what the record is.

Senator KERRY. Are you retreating now from the report put out by NTIA?

Mr. SIKES. I am not retreating. I felt that way at the time, but I will tell you that as the head of NTIA I was responsible for what was generally speaking a policy organization.

I am conscious that if you confirm me to serve as Chairman of the Federal Communications Commission, I will be leading a quasi-adjudicatory and quasi-legislative organization—at least as we attempt to further the laws passed by the Congress and signed by the President. Therefore, I am very reluctant to make comments when I know that the Commission today is gathering a record on which I, along with my colleagues in the future, if I am confirmed, must make a judgment.

Senator KERRY. Did you want to comment, Mr. Barrett, or Ms. Marshall?

Mr. BARRETT. No. My experience is so limited in that area, Senator, that I just do not think I could give you a satisfactory answer.

Senator KERRY. Well, let me ask you, without asking you again to prejudge, I would like to get a sense of your views. And we had a conversation privately in my office about it, and I think that Jim Mooney of the National Cable Television Association was here, and we asked him why it is that you could build a state-of-the-art cable system for $600 per subscriber, and they are being bought and sold for $2,800 per subscriber.

And the question, I think, has to be asked whether there are barriers to entry or whether there are—there is something about the economics of cable that makes more than one system in an area inefficient or what, and I wonder if you might share with us at least your sense as you approach this of the frame of the issues as you will confront them without judging them.

Mr. **Sikes**. Well, I think that cable broadcasters or cable casters—I am not exactly sure how I should refer to that industry—enjoy a very good business and not a very vigorous competition in hard wire distribution of video signals, on which many of us have started to rely exclusively.

And so, I think when you start from that foundation and you see a significant accumulation of local franchises by the top three, four, five or so MSOs, multiple service operators as they are called, and then you see those same companies beginning to get heavily involved in programming, which they then control locally through access, that we are approaching a point when the whole area, both of the market and of the laws, needs reexamination.

Fundamentally my preference is for more effective competition, but I am not certain in the short term at least, and maybe in the intermediate term, what potential exists so I think that, again, would be the background, Senator, in my approach to working with my colleagues on that issue.

Senator **Kerry**. The broadcasters have identified a growing number of popular sporting events that have now migrated to cable. Apparently this fall most Pac 10, Big 10, and Southeast Conference football games will be available on cable. In 1991 all 162 Yankee games and so forth.

And they explain the reason for that, obviously, the dual revenue base, the advertising and subscriber versus their advertising only base.

Do you think, number one, that that migration of popular events is a problem that you ought to be considering, we ought to be considering or jointly? And is there a framework of steps that you operate in within which we should be thinking about it?

Mr. **Sikes**. Well, generally speaking, there is not much precedent for dictating to programmers how they are to distribute their programming. I would add to that that some of the programming that you have just cited was not available over the air, but has been facilitated, if you will, by this new medium which allows in part subscriber-based revenue. So, when you deal with programming that has been, in a sense, spawned by cable and then force a different distribution pattern, you are dealing with a very complex question. I certainly know that free T.V., as it is called, is an important question, is going to become more important in the future.

I certainly intend to track the developments in free T.V. programming.

I think maybe one of the areas where I feel puzzled by the complex question is in the area of children's programming. In other words, I perhaps am more concerned about excellent services that have been again spawned by cable in part through vertical integration that are available to cable T.V. subscribers that are unavailable to people who happen to be unable to afford those services or whose home is not passed. I am referring to programming like The Disney Channel and Nickelodeon, which really provide some excellent cable programming.

And so I think this overall area is complicated and deserves attention, and we will give it some attention.

Senator **Kerry**. When you say well, I am—you are not approaching this at this point, then, with a specific set of steps that you think ought to be taken, and you do not see any imminent transition such as many broadcasters have been claiming we face which requires us to move more rapidly in order to prevent a demarcation point where suddenly you wake up and it is too late because the migration has already taken place and you have had this transition? You do not see that?

Mr. **Sikes**. If we are talking about sports, for example, I think the American public who enjoy cable service, and cable passes over 80 percent of the homes in America, are now able to watch preliminary rounds, say, of the NCAA tournament or the NBA tournament, and those games used to be unavailable on free T.V. So, I think most of the major events that have historically been on free T.V. events remain on free T.V.

But there has been an explosion of additional sporting events like the preliminary rounds directly attributable to cable. I think, consequently, we should monitor this area but not act hastily.

Senator **Kerry**. While you were at NTIA, I think you were a strong supporter of the "must carry rules." Those rules have been now twice struck down in court. Do you intend to try to initiate another attempt to restore those?

Mr. **Sikes**. Well, currently there are negotiations between the relevant industries—principally the cable and broadcast and programming industries—aimed at establishing a relationship, a "must carry" relationship, perhaps. It is not clear to me if they reach agreement—and they have been close to agreement and, in fact, there was a preliminary agreement that apparently was set aside but perhaps is back, at least in discussion—whether they are going to come to the Congress or the FCC to essentially legalize that agreement.

Obviously, if they come to the FCC, we will scrutinize it in respect to the public interest standard. Additionally, we will have to look at it from a constitutional perspective, which I think is going to be required due to earlier "must carry" rules having been overturned by the court.

Senator **Kerry**. And if no agreement were reached?

Mr. **Sikes**. I would like the chance to think about that and report back to you, but I do not find that to be something that I would try to avoid.

Senator **Kerry**. Except right now.

The current chairman—we now have the new price caps and custom tariffs which the current chairman has brought us towards. And last year you put out in that same report I referenced a notion that while there is dispute over the existence of effective long-distance competition, it was your belief that competitors "could survive" the AT&T deregulation.

Now, you have talked about Judge Greene and the relationship and conceivably that moves away from his—who knows. But if it did, do you favor continued deregulation of AT&T despite its dominant market position or are you committed to ensuring a more gradual transition to a reliable long-term competitiveness?

Mr. **Sikes**. Well, I think that we have to engage in adaptive regulation when it comes to the long-distance market. It is increasingly competitive. I think the report of the stock market underscores that fact as other common carriers have grown in value significantly. So it seems to me that we simply have to adapt, as the record in the tariff proceedings dictates, new approaches. These have to be taken up in the context of a tariff proceeding. Do I think that there is a dramatic market change going on? Yes, I do. Consequently, I think we have got to be adaptive.

Senator KERRY. Well, AT&T obviously makes the argument they ought to be allowed to do the same things as MCI and the others and so forth. Are you essentially saying that you do not think we are there, but that this has got to be a more gradual process because of their 75 percent domination or not?

Mr. SIKES. Well, I think in part I am saying that, but, you know, you have got different markets. For example, in the 800 service area, you have a market which is dominated or perhaps I should say is predominated by AT&T.

On the other hand, in the markets serving large commercial customers I think that it is clearly a much more contentious market, and it would be much more difficult to prove that AT&T's dominance is nearly as significant as it is in, say, the 800 service.

And so, I think it is going to require to an extent a record in some of these major service categories, and it cannot be generally speaking answered for all of the service categories.

Senator KERRY. Just one last question.

Mr. Patrick announced the commission was going to begin an inquiry to reexamine the question of whether the availability of three broadcast signals represents effective competition. Do you believe that that reexamination is necessary and are you going to continue that?

Mr. SIKES. I think it is warranted, yes, sir.

Senator KERRY. Thank you very much, Mr. Chairman.

Senator INOUYE. Thank you, Senator.

Senator Hollings.

The CHAIRMAN. Chairman Sikes, talking about avoiding, what about financial interest and syndication rules? Are you going to avoid that or are you going to change it or continue it as is?

Mr. SIKES. I think there are two facts which have provoked an industry negotiation much as has occurred in this area of must carry. One is that there is very much less audience support for network programming in prime time. Second, the consent decree restriction on in-house production expires in 1990. Consequently, I think that it is perhaps wise for the commission to watch the industry negotiations progress and then, if there is a new agreement, hold it up to the public interest standard through an administrative proceeding.

The CHAIRMAN. The public interest standard, I am glad to hear you emphasize that, because each of you has given the correct answers, but I denote that deregulation disease, symptoms of it from time to time in your answers.

Mr. Barrett, with respect to—we do not exist in a vacuum. We did is the point I was trying to make when I recounted history, and when we took it on, we took it on, on the public interest standard upheld by the Red Lion case. And that is the test that we really need—and there is a scarcity of that spectrum. When, again, Mr.

Sikes comes around—I guess maybe he is protective of the former administration mentioning Justices Brennan and Hugo Black and the freedom of speech and freedom of the press.

Let me emphasize if you have got the money, you can start a newspaper anywhere you want to in this country. You can be Donald Trump and you cannot start one in Delaware or a broadcast station. So, there is a limited spectrum. There is a scarcity of the spectrum that has been publicly found, and even if I have got Eddie Fritts from the NAB who used to contend otherwise in his statement, that the spectrum is scarce and, therefore, can be controlled by the Congress in the interest of the public.

Now, yes, you are right. We had Justice Brennan and Justice Black on the freedom of the press and freedom of speech. But even with those particular forerunners of the Bill of Rights and their decisions we had still none of this smut that you are hearing about, obscenity and violence under the Justice Brennan and Justice Black decisions.

Dick Wiley controlled that thing. I saw him come up here and we brought in the broadcasters and everything else, and we took different programs, and we had them on a sort of self-enforcement rule of their own, self-censorship taking out the scenes of violence and the obscenity and everything else in their T.V. production. And that is what we are trying to get back to, some sense of responsibility.

You folks are going to take an oath. It is an oath to regulate and not an oath to deregulate. I cannot get that through the heads of the FCC commissioners.

And, again, Ms. Marshall, you said there are problems as to the enforcement. That former commission found problems to enforce any and all regulations, not just the Fairness Doctrine, but any regulation was a problem to them. They just got the bit in their teeth to do away with it all as quick and as fast as they could and thereby the chaos that we suffer from.

And we are trying to bring order out of it now with you three, and we hope you will work with us in the public interest, administering our policies, our laws here that we set in the Congress.

I want to thank you, Mr. Chairman. I just want to emphasize that they are regulators and not deregulators.

If you want to deregulate, recommend to us, it might pass, but do not willy-nilly just start meeting.

And we are having to try to catch up with the monopolies now that come about and cross-ownership, the situations that you get into, the trafficking and ruining broadcasting, the Fairness Doctrine.

And now you have got political shorts on, editorials unanswered. You are getting personal attacks unanswered, and all because we do not have the Fairness Doctrine anymore. We have got way more problems now.

We had not brought a case in 12 years, Ms. Marshall, as you well know, on the Fairness Doctrine.

Thank you, Mr. Chairman.

Senator **Inouye**. Senator Gore.

Senator **Gore**. Thank you very much, Mr. Chairman.

First of all, a brief follow-up on the earlier subject. In discussing programming for children and the public interest standard, obscenity and explicit violence is one part of the issue. A second part of the issue is whether or not broadcasters have an affirmative obligation to serve the public interest by providing programming that serves the needs of children.

And you may be quite familiar with the flipside of this issue, in that Captain Kangaroo, for example, is no longer welcome on any of the networks. I do not think there is any programming produced on network television now in prime viewing hours for children. I do not think there is anything like the programs that used to be available from time to time.

And, again, the phrase, "the public interest," I think should be construed in a way that includes the interest of all the public. And I even think that children should be particularly singled out as part of the public because, as some of my colleagues have mentioned, it is such an enormous influence on their lives. They spend more time in front of the television set than they do in a classroom. It has become a cliche by now to mention that fact, but it is, nevertheless, a salient and extremely important fact. They cannot be seen only as little, miniature adults who are consumers.

With the chairman of the subcommittee present one time before in another hearing, I said that what we are doing, in effect, is strip-mining our children's minds by going to the lowest common denominator and not providing them the kind of nourishing material that could and should be provided. I will not belabor the point, but I did want to emphasize it because I think that is the flipside of the issue we were discussing in the last round.

Several of my colleagues have discussed the policy on telephones; and I will submit some questions for the record there. From time to time, if the three of you are confirmed, we will be engaging in a number of discussions along those lines. And I have some disagreements there with what has been done in the past.

The chairman of the committee, Senator Hollings, has already raised the issue of the financial interest and syndication rules. And that is an extremely contentious issue, as you all know. There are restrictions, as you know, on the amount of network programming that can be produced and owned and syndicated by the networks themselves.

And I, for one, believe that this issue should continue to be negotiated and resolved by the parties. And I think that it is obvious that the financial interests of a network in a potential program would lead them to give that program priority access to the airwaves over and above an equal or nearly equal program produced by someone else. And there is a history of abuse there that I think the Commission should recognize and respond to.

Now, on the question that I do want to ask, not just for the record, in the limited time we have, my colleague from Massachusetts, Senator Kerry, began a discussion of the concentration issue. I think there is actually a connection between that and some of the other issues we have been discussing. Because the acquisition of unreasonable monopoly power by cable television has produced new pressures on all other forms of presenting television signals.

The pressure they have put on the satellite industry has led, in part, to the dramatic increase in piracy of signals. And I think we have got to have very tight and tough penalties on pirates of signals. But we should recognize that, again, this is a symptom of an unreasonable monopoly power.

Let me just give you a few examples and ask you to comment.

A new cable multi-system operator in Tennessee put together a go-go financing package and came in and bought up a whole bunch of small rural systems where the customers could not really get over-the-air service very well. And then they virtually doubled the rates to service the debt without providing any improvement in the service at all.

A second example. The large multi-system operators now routinely shake down a programmer and demand that they cough up a portion of the ownership of the program before they are allowed access to the large cable systems. It is a shakedown, pure and simple.

NBC, the most profitable broadcasting network, announced it was going to compete with CNN. And before they could get their signal on the air, they had to formally agree they would not compete with CNN, and change the nature and character of their programming service as a condition of being allowed access to the multi-system operators cable systems. And they had to cough up $20 million in return for a nearly worthless subsidiary of the largest multi-system operator, TCI, a reselling service that, as far as I can determine, did not have any market value to speak of. But this was just sort of tribute that NBC was forced to pay in order to gain access.

A UHF broadcaster in Long Island had an excellent news program focusing on Long Island news, but as cable penetration increased, they found they had to get on the cable in order to get the viewers, because as you know, people do not switch back and forth once they hook up to the cable, they just watch the stuff that is on the cable, usually, including the over-the-air signals that are on the cable.

But this UHF station could not get on the cable because the cable operator also had a Long Island news program and did not want the competition. And so the UHF station was again subject to a shakedown; had to agree, as tribute, to cancel its excellent local news programming before it was allowed onto the cable.

Well, that deprives the public of diversity, of news sources, of competition and, I think is yet another symptom of a case that has gotten completely out of control.

The final example, of course, and I could go on and on with many of them, but the final I will bring up is the case of the satellite television industry; where they just impose a rule on the programmers, most of whom are owned by the cable systems, and the rule is you will not sell to any distributor unless they are a cable television company. That is the rule, keep it in the family. We have all got to keep tight controls on the availability of programming. And you will be blackballed if you sell to anybody outside the cable television industry.

As a result, the only contractor that has tried to get in there and buy programming wholesale to redistribute it to satellite dishes, who is not a cable television company, got it because of political pressure from this committee. And they testified just last month that the best they could get was a wholesale rate 430 percent higher than the available rates to cable television systems.

It is a monopoly that is out of control. It is a concentration of power that is causing damage to over-the-air free television, causing damage to the satellite industry, to the wireless, to every other alternative source of programming. And I do not see any justification for allowing it to continue. Because any industry in this country ought to have either competition or regulation, one or the other. And the cable industry now has neither.

So, with that as a long preface, do you wish to comment on that and do you agree wholeheartedly with what I have said? And, if so, what are you going to do about it?

Mr. **Barrett**. I heard you, Senator. And we do not regulate them in Illinois and we have the same problems in Chicago, I think, that you have stated.

Senator **Gore**. Well, the Federal Government has a law that prevents you in the states or local governments from regulating cable television. You grant a monopoly franchise at the local level and then you cannot do anything about it. I proposed last week that we have a monopoly preservation fee to raise some of the money.

Mr. **Barrett**. And I am sure you read in the June 1989 Washington Monthly issue entitled, "Why Cable Costs Too Much," giving the Sacramento, California experience. So, I would say that while we in Illinois do not regulate it, I have a keen interest and I will learn more about it.

Mr. **Sikes**. As I earlier said, we will be looking in the short run at the effective competition question; in the longer run, at completing the congressional-directed fact-finding study recommendations that I presume might lead to, you know, recommended changes in the Cable Act of 1984.

Ms. **Marshall**. I share your concerns about monopoly power. I would like to study it carefully. And the Commission has a number of open dockets; I have not had a chance to review all those records, but I think the issue of effective cable competition is something we should make a priority at the Commission.

Senator **Gore**. Thank you very much, Mr. Chairman.

Senator **Inouye**. I have just one question. I was deeply disturbed by one of the questions asked by Senator Gore. I would like to follow up on that.

In the dark and sinister and perverted world of pornography, the worst form of pornography, according to law enforcement officials, is the so-called snuff film, the film that shows murder on video.

Would you, as commissioners, permit snuff films to be shown on TV screens?

Mr. **Barrett**. I doubt that very seriously. That bothers me.

Senator **Inouye**. You doubt that or you would not?

Mr. **Barrett**. I do not think so.

Senator **Inouye**. Mr. Sikes.

Mr. **Sikes**. Well, I find that outrageous. But I have to say that I have not examined that in respect to the authority that the Commission has been delegated, or in respect to any sort of case law whatsoever. And so my preference would be to tell you exactly what you want to hear; all I can tell you is that I think snuff films are outrageous and that I will certainly examine that in light of whatever authority we have.

Senator **Inouye**. When a pornographer is caught with a snuff film, he is put in jail. But you would permit that?

Mr. **Sikes**. It would not be my hope that that would be permitted.

Senator **Inouye**. Ms. Marshall.

Ms. **Marshall**. You are talking about equating snuff films with——

Senator **Inouye**. I have never seen one, but it has been described to me that on film they would show a man shooting someone through the head or stabbing another person or choking him to death.

Ms. **Marshall**. The Commission has the authority to ban obscene programming. I suppose you could call snuff films of this kind obscenity, and you could ban it. If not, I am not sure what the Commission's authority is in terms of censorship per se, but I would like to see us get sufficient authority to deal with this problem. I do not think you should have snuff films anyhow.

Senator **Inouye**. I am not talking about news.

Ms. **Marshall**. Right. Yes, you are just talking about programs for entertainment.

Senator **Inouye**. A snuff film is not news.

Ms. **Marshall**. Right.

Senator **Inouye**. It is entertainment for the perverted.

Ms. **Marshall**. Right. I would like to see it banned.

Mr. **Sikes**. Well, let me say this. I guess maybe I was a little slow on the uptake. You know, I have not examined this at all. If you mean films where people get some sexual pleasure through killing people, then the answer is absolutely that is actionable, and we would proceed vigorously.

Senator **Inouye**. Well, what about the sounds of murder? What if you do not have video, but just the sound of the same thing as described by Senator Gore?

Mr. **Sikes**. I have heard 911 tapings before. Some of the 911 tapings that I have heard——

Senator **Inouye**. Well, they were news.

Mr. **Sikes**. That is correct. And that is the distinction I am trying to draw. And therefore I am a little hesitant to speak in a blanket way about tapings of crimes, Senator.

Senator **Inouye**. I gather what Senator Gore described was not news. Was it news?

Senator **Gore**. It was presented as entertainment is my understanding of it.

Senator **Danforth**. Excuse me, Mr. Chairman.

I think the question has to do with the commission of a crime for the purpose of recording it, for the purpose of selling it. That is my understanding of it. In other words, it is not just, say, an accidental recording or something over the news, but something that is actually conducted. That is, if you could arrest the people you could prosecute them for murder.

So, I understand the question to be if that is then disseminated, either the picture or the sound of it, is it actionable? And in my understanding, the answer is yes, it is.

Senator **Gore**. But, if the Senator will yield. The issue does go beyond that, though. Because there is, for example, a video that makes a lot of money called "Masks of Death," which is made up of real deaths on videotape. And frequently it is marketed without any kind of designation, any kind of restriction to the youngest kids who want to purchase it.

If that was broadcast over the airwaves as entertainment, it seems to me that the chairman's statement is apt. That is kind of the ultimate form of pornography. And everybody realizes that there are all kinds of difficult questions involved here. Everybody acknowledges that.

But, again, the general approach has been just complete hands off. There are ways the FCC can get at this, if there is a will. And there has not been a will there. I am not going to go back over all of the issues involved. But that is, I think, what the chairman is getting at. And we want to see some demonstration of will to get at this problem.

Senator **Inouye**. At the least, if I were a commissioner, you would not get relicensed, at the least.

Well, with that, I would like to thank all of you. And, as noted, we have tried our best to expedite the procedure. We have received all of your appropriate papers. They have been filed and received. Your financial statements have been filed and received, and in proper form. And your FBI reports on your security clearances have been appropriately filed with the committee, examined, and we find nothing wrong.

I thank you all very much.

Mr. **Sikes**. Thank you, Mr. Chairman.

Senator **Inouye**. And now we have a final panel consisting of the President of Palmetto Family Caucus of Columbia, South Carolina, the Reverend E. Ray Moore, Jr., President; the legal counsel of the American Family Association of Tupelo, Mississippi, Ms. Peggy Coleman; and the President of the Religious Roundtable of Memphis, Tennessee, Mr. E.E. McAteer.

Ms. Coleman and gentlemen, welcome to the committee. May I first call upon the Reverend, Mr. Ray Moore, President of Palmetto Family Caucus.

Before we proceed, may I assure all three of you that your statements have been received by the committee, and without objection, your full statements will be made a part of the record, with your documents in some cases. And if you wish, you may proceed by summarizing.

STATEMENT OF E. RAY MOORE, JR., EXECUTIVE DIRECTOR, PALMETTO FAMILY CAUCUS

Mr. **Moore**. Mr. Chairman and distinguished Senators, I deeply appreciate the opportunity to address the committee today concerning the FCC and these nominees. I have submitted a longer statement, but will summarize with a few additional remarks.

I have been active for many years in public policy, serving as a campaign consultant for pro-family candidates, including Vice President Dan Quayle's first Senate race and the Pat Robertson campaign in South Carolina in 1987–1988. I would like to add that I am not representing either one of them here today.

I am Executive Director of the Palmetto Family Caucus, a coalition of pro-family organizations based in South Carolina. I have some 12 years of pastoral experience, am married and the father of four children.

Today I speak on behalf of pro-family voters who are concerned about the continued deterioration of the American family, much of which is caused by a flawed and failed public policy. Also, I speak unofficially on behalf of thousands of pastors and Christian counselors who deal with these matters daily, as well as parents who are concerned for their children's welfare.

In the past few decades, we have witnessed an unprecedented growth in the power and influence of the broadcast media. This power, along with the concentration of ownership of such media, has occurred in the absence of meaningful regulation. The FCC, especially in the last eight years, has totally failed to enforce its own decency standards against those who violate the laws against obscene and indecent broadcast material.

Television, in particular, has become a third parent, but an unwholesome intruder into the American family. And yet this third parent is proving to be an increasingly destructive influence, subjecting children to violence and sexual promiscuity as a normal way of life.

Time Magazine reported that by the age of 16, the average American child has seen over 200,000 violent acts on TV, including 33,000 murders. American children are becoming overstimulated and undernourished. Overstimulation by the media and moral undernourishment by the family are producing a generation of psychological addicts. Parents are overwhelmed and looking to their elected and appointed leaders for legal and moral and psychological protection from the poisonous pollution of the airwaves emanating more and more from broadcast industry.

Plato asks in the Republic, "Who will guard the guardians?" The FCC is supposed to oversee the broadcast industry and Congress is charged with guarding the FCC. Congress, the Senate in particular, must assure that we have FCC commissioners who will uphold the law against obscene, indecent and profane broadcast material believably and without equivocation.

I regret to say that none of the three nominees have a serious or demonstrated record of concern for decent programming or preserving the Fairness Doctrine.

Mr. Sikes, in particular, is a proponent of the abject deregulatory policies of the Fowler-Patrick dynasty, which opened the door to shock radio, cable porn and indecency during prime time family viewing.

Because parents and officials have failed to act, we are becoming a nation of addicts. The Colombia drug cartel has not done it to us; we have done it to ourselves. The media seem to be creating a culture of addicts. It is hard to inveigh against drug and alcohol abuse, teen pregnancy, physical violence, when our children are fed a steady diet of these things on television.

People become what they visualize. And much of their visual images are supplied by TV. We all know this to be true. Why else would corporations spend billions of dollars for advertising to persuade us to buy their products?

The result of this unwholesome diet: many of our children cannot think, cannot read, cannot work, cannot compete, cannot sustain intimate relationships, but they have become good at substance abuse, teen pregnancy and violence.

What can you and I do to help break this cycle?

One step, I think, is to begin to understand the destructive impact of unwholesome programming, particularly the effect of the last eight years of a laissez-faire approach to decency in broadcasting by the FCC.

Therefore, I urge your committee to initiate a series of public hearings on this problem. Let them be in the form of a nationally televised town meeting in which those who deal with the social consequences of addictive and destructive programming can testify. Let the nation begin to hear from parents, psychologists, pastors, educators, legal experts, and yes, broadcasters, about the media's impact on our culture and the FCC's role in regulating indecent, obscene and profane broadcast material.

What else can this committee do?

Rather than routinely approving these three nominees, I urge you to delve more deeply into their positions regarding the role of the FCC in enforcing the law against indecent broadcasting. In particular, the failure of Mr. Sikes to address the decency issue publicly and forthrightly until today, raises serious questions in my mind about his fitness to become the FCC Chairman.

While he may be technically competent to hold a government position, now is not the time, figuratively speaking, to place a doctor in charge of AIDS research who does not believe that AIDS exists or that it is not a serious problem.

In conclusion, Mr. Chairman, if the committee feels impelled to confirm the nominees out of a senatorial courtesy, please, at least delay your vote and recommendations until after the August recess, and concede to America's parents one month to debate the issue; one month for you to consult with your constituents; one month to take a deeper look at a problem that has profound implications for the life and health of generations of young Americans.

Thank you.

[The statement follows:]

STATEMENT OF THE PALMETTO FAMILY CAUCUS

CAN WE AFFORD TO LOSE ANOTHER GENERATION?

Will the New Federal Communications Commission Fulfill Its Public Trust Obligation To Enforce the Law Against Broadcast Indecency?

Introduction

The Senate Commerce Committee stands at an historic moment in the nation's history as it considers three nominees for vacancies on the Federal Communications Commission. What these nominees believe and what they will do on the Commission to fulfill the FCC's public trust obligation to enforce the law against broadcast indecency may well determine the future of yet another generation of young Americans. The Palmetto Family Caucus urges the Senate Commerce Committee to carefully examine the three nominees to the FCC in light of the past failures of the FCC to enforce the law against broadcast indecency and in light of what appears to be an overwhelming majority of Americans who are demanding that something be done about excessive sex and violence on broadcast radio and television. The following recent events highlight the nature of the danger posed to the next generation of young Americans if the FCC fails to act:

-Louis Harris & Associates, Inc. recently conducted a study of television sexual content. The study which focused on the 1987-88 television season revealed that 65,000 references to sexual behavior were made in network programming during the period surveyed. This averaged 27 sexual references per hour. Virtually all of the programs treated sexual activity in a casual manner without discussion of consequences, nor of any apparent consequences included in the scripts.

-Recently, the American College of Pediatrics released a study of teenage pregnancy and concluded that a major influence towards increasing levels of teenage pregnancy is the manner in which sexual relations are shown on television, discussed on radio, as well as treated in movies.

-Lee Iacocca, Chairman of Chrysler Corporation, on June 13th told the Hollywood Television and Radio Society in Los Angeles that Chrysler Corporation is considering pulling its commercials from shows which include "bedroom bingo" and extraneous violence.

-Not long ago the National Council of Churches criticized current standards of broadcasting by saying that "The quality of life in our society is threatened by the amount, intensity and graphic persuasiveness" of violence and sexual violence on television. The group concluded that their research shows an "undeniable" correlation between media violence and aggressive behavior.

-On June 17, 1989 the General Assembly of the Presbyterian Church (U.S.A.) adopted a resolution protesting to the national networks against "irreverent, profane and derogatory references to God and to Jesus Christ" on prime time television.

-Michigan housewife Terry Rakolta from Bloomfield Hills achieved national attention with her successful letters to sponsors of "Married. . . With Children" protesting the anti-family values broadcast in the show.

-Advertising Age on July 3, 1989 reported that nearly two-thirds (65%) of Americans believe that there is "too much sex on network television". The study, which was conducted by the Gallup Organization found that even among viewers 18 to 34, who would be expected to be most liberal in their attitudes about sexuality, a majority (51%) agreed that some television programs have gone too far. Concern about sexual content according to the Gallup-Advertising Age poll was especially strong among women, 78% of whom said they see too much sex on tv.

-Time Magazine on June 12, 1989 reported that 88% of Americans believe that teenage violence is a bigger problem than it was in the past and 67% believe that too much sex and violence in movies/tv is responsible. The poll which was conducted for Time by Yankelovich, Clancy & Shulman further found that 73% of Americans believe that there should be "greater restraints on the showing of sex and violence on television.

What has become increasingly clear over the last three years is that increasing numbers of Americans, apparently a large majority, are fed up with the current level of sex and violence on national television and concerned with raunch radio's indecent broadcast material. This memorandum will provide to the Senate Commerce Committee reasons why nominees for the FCC should not be confirmed by the Committee who are not absolutely pledged to enforce the law preferably with a pattern of past statements and behavior, and publically committed to take action against broadcasters who have violated the law.

I. What has the Federal Communications Commission Done in Regard to the Enforcement of the Law Since 1980?

Human Events for May 2, 1987 accurately set forth the problem with the Federal Communications Commission in this decade as follows:

> "As Chairman of the Federal Communications Commission for the past six years, Mark Fowler won plaudits from conservatives for his vigorous efforts to inject free market competition into the nation's broadcast industry, but that support was marred by Fowler's refusal to enforce the laws against obscenity and indecency sent out over the nation's airwaves and telephone wires."

Mark Fowler served as Chairman of the FCC from early in the Reagan administration until April 17, 1987 when he resigned, after meeting stiff opposition from pro-family and pro-decency organizations against his pending reappointment by the White House. Fowler, who had frequently described himself as a "classic Libertarian" not only was a deregulatory-minded Commission Chairman, but he was also philosophically committed to seeing that the FCC did not enforce the law against obscene, indecent and profane broadcast material. For example, on April 30, 1984 Fowler stated:

> "I have said that the ultimate aim in broadcast regulation is to go to the print model, which would essentially mean that you would have an agency that administered technical rules, but there would be no content rules or other kinds of rules." (Broadcasting)

Fowler told Broadcasting magazine on February 18, 1985:

> "I am still dedicated to the effort to remove content regulation."

Showing that he disagreed not only with the law prohibiting obscene, indecent and profane broadcast material, but also disagreed with the Supreme Court's upholding of the law, Fowler issued an FCC press release quoted in Broadcasting magazine on April 29, 1985 in which he took the following incredible position:

> "Unless speech, no matter how abhorrent, creates a clear and present danger of serious evil that rises far above the public inconvenience, annoyance or unrest, or is aired in violation of the Communications Act, or (the FCC's) regulations; (the FCC) (will) not punish licensees for airing it."

Fowler's tenure at the FCC succeeded in producing over six years of unregulated radio and television in which virtually any content was allowed. His tenure at the FCC was greeted by many who objected to his failure to enforce the law:

> "The Commission has changed the moral environment of the market place in which broadcasters operate." - Eugene F. Mullin of Mullin, Rhyne, Emmons and Topel, Broadcasting, April 21, 1986.
>
> "You are saying the FCC could never, possibly, under any circumstances, declare that a film was obscene, or that it didn't even have to accept the declaration of obscenity by the Supreme Court at any time. . . It seems to me the FCC has rendered itself almost incapable of any action in this regard. . . The FCC has exhibited extraordinary irresponsibility." - Father Bruce Ritter, Attorney General's Commission on Pornography hearings in Los Angeles, 1985.
>
> "The Fowler administration will be remembered for its drive for eliminating regulations without regard for the public interest." - Andrew Schwartzman Broadcasting, February 18, 1985.
>
> Chief Justice Warren Burger in an interview in Broadcasting on April 21, 1986 noted the difference between the print media and broadcasting media when he stated that a difference remains "between the treatment of broadcasting, which uses the public airwaves and the fellow "who operates a printing press".
>
> "Mark Fowler's attitude towards his job is out of sync with the law. . . Fowler has pulled the wool over the eyes of some conservatives by waving the buzz word 'derregulation'. Derregulation of the airlines has been good because it brought about competitive low fares, which in turned enabled millions of Americans to ride on a plane for the first time. But try asking those millions of Americans if they want 'derregulation' of safety rules about air travel to follow derregulation of fares, and you'll get a thunderous 'No'. Likewise with television and radio; price derregulation is welcome, but decency derregulation is unacceptable." Phyllis Schlafly, Press Release, April 24, 1986.

Following Fowler's somewhat forced termination as Chairman of the FCC, Dennis R. Patrick, who was previously on the Commission, was designated by the White House as the new Chairman of the Commission. Initially, many were cheered by Patrick's support (which was also Fowler's last official action) of the FCC's "Indecency Enforcement Standards", adopted on April 16, 1987. The Standards provided that action would be taken against broadcasters, not only for airing the "seven dirty words" from the FCC vs. Pacifica case in 1978, but also that the FCC would apply a broader "generic" definition of indecency under which stations would be penalized if they broadcast offensive "language or material which depicts or describes. . . sexual or excretory activities or organs". The Indecency Enforcement Standards were immediately attacked by various parties which caused the FCC in 1987 to delay the enforcement of the Standards until it could re-examine the Standards. The FCC re-examined the Standards and on November 24, 1987 stated that the Standards would be applied by the FCC.

A lawsuit was filed against the FCC by Action For Children's Television, among others, and the United States Circuit Court of Appeals for the District of Columbia heard the case, deciding in late July, 1988 that the Indecency Enforcement Standards were constitutional for programs aired during hours in which children could reasonably be expected to be in the audience.

Again, pro-family, pro-decency supporters were cheered by the decision by the Court and expected the FCC to begin to take firm action not only against television broadcasters who broadcast indecent material but also against Howard Stern of WXRK-FM and WYSP-FM in New York and Philadelphia; Doug "the Greaseman" Tracht of WWDC-FM in Washington, D.C.; Caroline Fox of WHJY-FM in Providence, Rhode Island; James "Moby" Carney of Dallas' KLOL-FM; "Poor Man" Jim Trenton and Jay Rower in Los Angeles; Cleveland Wheeler and Jack Harris of Tampa, Florida; Steve Dahl and Gary Meier in Chicago; Bob Kevoian and Tom Griswold of WFBQ-FM in Indianapolis; and Neil Rogers of WIOD in Fort Lauderdale. These "shock-jock" disc jockeys have been the subject of numerous complaints filed with the FCC by concerned parent's groups in their respective listening areas, but which had not received any attention by the FCC prior to the decision by the United States Circuit Court of Appeals for the District of Columbia in mid 1988. The stations aired programs containing material which could only be described as extremely offensive, indecent, obscene and profane and which material was normally aired in morning hours when children were exposed to the programs while preparing for school, while riding on school buses and in other settings.

Incredibly, from July, 1988, when the District of Columbia Federal Court upheld the Indecency Enforcement Standards, until this very day, the Federal Communications Commission has yet to take any action, of any sort, to enforce its own Indecency Enforcement Standards against those who cavalierly violate the law.

In light of the past history of violations of the law, and the FCC's violation of its public trust obligation to enforce the law, the Senate Commerce Committee is faced with a major policy question. That policy question is weather nominees to the Federal Communications Commission in 1989 should be confirmed by the Senate when those nominees have wholly fail in their past business or professional careers to a public position against indecent broadcasting or who failed during the hearings before the Commission to unequivocably, unilaterally and without question believably pledge to the Committee to vigorously and immediately enforce the law, as adopted by the Congress and upheld by the Courts, against obscene, indecent and profane broadcast material.

The Palmetto Family Caucus respectfully urges the members of the Senate Commerce Committee to deny confirmation to persons who fail in this regard.

II. What Does the First Amendment Allow?

There is widespread misunderstanding as to what the First Amendment allows to be broadcast in the United States. The Congress of the United States, reflecting the will of the people, in 1934 enacted the Communications Act which prohibits obscene, indecent and profane broadcast material in Section 1464 of the Act. Section 303 of the Act authorizes the FCC to suspend the license of any operator upon proof that the licensee has violated any provision of any act which the FCC is authorized to administer. Section 303 further provides for suspension if the licensee has transmitted radio communications or signals "containing profance or obscene words, language or meaning". Section 312 of the Act provides for the issuance of cease and desist orders if Section 1464, which bans obscene, indecent or profane language by means of radio communications, is violated or not observed. Further, Section 503 of the Act provides that any licensee or permitee of a broadcast station who violates Section 1464 shall "forfeit to the United States a sum not to exceed $2,000 (for) each day during which such violation occurs. . ."

In addition, Section 323 of the Communications Act prohibits censorship by the FCC. Many have misinterpreted Section 323's prohibition against censorship to mean that the FCC can never take action to enforce the Act's prohibition against obscene, indecent and profane broadcast material. The Supreme Court of the United States, however, specifically stated in the case of FCC vs. Pacifica, (1978), 98 S. Ct. 3026 that the FCC has the authority under the Constitution to take action against broadcasters who improperly broadcast obscene, indecent or profane material. The Supreme Court has held that the Act's prohibition against censorship only applies to "prior restraint", by which the FCC would attempt to prohibit the broadcast of material before it is actually broadcast. However, the Court has held that once the material is broadcast, if it is found by the FCC to have violated the Communications Act, that the FCC is empowered, pursuant to law and the Constitution of the United States, to take action against the violating broadcaster.

Interestingly, the Supreme Court of the United States in the case of Sable Communications of California, Inc. vs. FCC, decided by the Court on June 23, 1989, again reaffirmed its prior holding in FCC vs. Pacifica Foundation in which the Court "concluded that special treatment of indecent broadcast was justified". The Court in Sable again referred to the "unique attributes of broadcasting, noting that broadcasting is uniquely pervasive, can intrude on the privacy of the home without prior warning as to program content and is uniquely accessible to children, even those too young to read," quoting from Pacifica. Therefore, even the current 1989 Supreme Court has again affirmed that the FCC may take action against broadcast material which is "indecent". The question for the Senate Commerce Committee becomes one of whether or not the Senate will conffirm nominees to the FCC who are philosophically uncommitted to enforcement of the law in this vital area.

III. The Protector of the Airwaves Has Ceased to Protect.

The Palmetto Family Caucus strongly supports the First Amendment of the Constitution of the United States which by its very existence accords to the Caucus the right to freely speak and make known its views to the public at large, including well as the Senate Commerce Committee. However, the Palmetto Family Caucus believes, as does the Supreme Court of the United States, that there are certain instances in which the psychological well-being of our children justifies a restriction on broadcast material which is clearly indecent, obscene or profane.

As was noted above, 88% of the American people, according to Time magazine of June 12, 1989 in a poll by Yankelovich, Clancy & Shulman believe that teenage violence is worse than it used to be. In addition, 67% believe that the factor mainly to blame for teenage violence is too much sex and violence in television and movies. Seventy-three percent believe that there should be greater restraint on the showing of sex and violence on television. In that the Supreme Court of the United States upheld action by the FCC against broadcasters who violate the ban against indecent, profane and broadcast material, and in that a huge majority of the American public believes that restraints should be placed on sex and violence on television, one must seriously wonder why the White House selected three nominees for the Federal Communications Commission who have no known public position in favor of enforcing the decency law. In fact, Alfred Sikes' interviews with the media since his appointment by the President have led many pro-family, pro-decency organizations in the country to conclude that he is antagonistic towards enforcement of the law against indecency and himself unmindful, or worse, indifferent to the concerns of a vast majority of Americans in protecting their children.

Is it any wonder that American children are increasingly turning to drugs, sexual activity and violence in their young lives when the visual and auditory impressions given to them come from a society which apparently approves of those impressions, because of the failure by the appropriate agency, the FCC, to enforce the law, thus reinforcing the impressions.

Time magazine pointed out that by the age of 16 the average American child has seen over 200,000 acts of violence on television, including 33,000 murders. Sexually explicit broadcast material has clearly led many young men to reaffirm the all too common attitude that when a woman says no she really means yes. Time noted that many experts believe that sexual content on television and in movies may be a contributing factor in "date rape", one of the most common adolescent sexual crimes. Sociologist Gayle Dines-Levy of Boston Wheelock College points out that teenagers are only doing what they see others do and that they are "being conformists".

Lessons which may be taught by parents, or even at school, are easily overpowered by the behavioral messages being blared from stereos and televisions which amount to a secondary education for the young. Many in the Congress and in the executive level of government must ask themselves when they are faced with a serious teenage problem in their own families with drugs, sex or violence, as to whether or not if they had been more vigilent in requiring the appropriate agencies of government to enforce the law that their very homes might have been spared these problems. Whether or not persons in government ask these questions, persons in other parts of the country are definitely asking what has happened to the protectors, why are they not protecting?

IV. Why the Senate Should Withhold Confirmation of Alfred Sikes as Chairman of the Federal Communications Commission.

Alfred Sikes, who has been selected by the Bush Administration to become Chairman of the Federal Communications Commission, should be denied confirmation by the United States Senate for the reasons as set forth below:

1. Sikes is openly opposed to the Fairness Doctrine which is currently in the process of adoption in the Congress. Senator Ernest Hollings, Chairman of the Senate Commerce Committee, has stated that the Fairness Doctrine is paramount on his communications law agenda for 1989. Sikes' unwillingness to support the requirement that broadcasters allow contrary opinions under the Fairness Doctrine will clearly lead to difficulties for his confirmation. Sikes appears to be following the Mark Fowler tradition of opposition to the Fairness Doctrine and consequently favoring the increasing concentration of access to

public speech in the hands of a limited number of broadcasters who can afford to buy television or radio stations.

2. It further appears that Sikes is not a supporter of Children's Television Advertising Guidelines which would control the excessive level of advertising of children's products during children's television shows. This is a matter of some concern to numerous members of Congress, on both sides of the aisle. Sikes appears to be unwilling, as Chairman of the FCC, to protect the interests of youthful viewers and listeners.

3. In spite of the fact that millions of Americans, according to recent polls, are distressed with "trash television" and "raunch radio", Sikes appears to have decided to avoid the decency issue and is not expected to enforce the law against obscene, indecent and profane broadcast material, if he is confirmed.

4. As the head of the Commerce Department's National Telecommunications and Information Administration Sikes has recommended that the U.S. adopt Japanese technical standards for high definition television. American electronics companies and affiliated industries are distressed with this suggestion, in that if Japanese standards are identical in the United

States, few question that Japanese high definition television products will swamp the U.S. market to the exclusion of U.S.-built products. Consequently, Sikes' endorsement of Japanese standards should be a serious blow to his confirmation.

The Palmetto Family Caucus would respectfully urge that the Senate Commerce Committee not grant its approval to Alfred Sikes as Chairman of the Federal Communications Commission. The Palmetto Family Caucus believes that upon close examination of the record of Mark Fowler and the background of Alfred Sikes that there are a number of similarities between the two gentlemen which convinces us that if Sikes were to be confirmed, for the proposed five year term, that we could well lose another generation of children to trash television and raunch radio. Those comparisons are:

Mark Fowler	Alfred Sikes
Former broadcaster	Former broadcaster
Opposes the Fairness Doctrine	Opposes the Fairness Doctrine
Opposed Children's Television Advertising Guidelines	Appears to oppose Children's Television Advertising Guidelines
Opposed Enforcement of the Law Against Obscene, Indecent and Profane Broadcast material	Appears to oppose enforcement of the Law Against Obscene, Indecent and Profane Broadcast material
A "Deregulation" Supporter	A "Deregulation" Supporter

Supports concentration of Ownership of Media Outlets	Supports concentration of Ownership of Media Outlets
Frequently at odds with the Congress	Remains to be seen.

Conclusion

Alfred Sikes' failure to address the decency issue in any known public or written statement is indicative of an apparent unwillingness to face this critical issue head on. This is not the time to put a mechanic or a technician in charge of Chrysler. While Mr. Sikes may be technically competent to hold some governmental position, placing him as Chairman of the FCC at this historic juncture in the American family is analagous to placing a surgeon in charge of the cancer program who either doesn't believe in the existence of cancer or doesn't see a serious problem.

For all of the reasons as set forth above, the Palmetto Family Caucus respectfully urges the Senate Commerce Committee and the United States Senate to reject the nomination of Alfred Sikes as Chairman of the Federal Communications Commission and to require all nominees to the Federal Communications Commission to unequivacably, irrevocably, believably pledge to enforce the Communications Act of 1934 as it relates to indecent, obscene and profane broadcast material. Our children are too important, and the next generation of Americans are too important, to do otherwise.

Senator INOUYE. Thank you, Reverend Moore.
Ms. Coleman.

STATEMENT OF PEGGY COLEMAN, LEGAL COUNSEL, AMERICAN FAMILY ASSOCIATION

Ms. COLEMAN. Thank you. My name is Peggy Coleman. I am general counsel for the American Family Association. Reverend Donald Wildmon is the executive director and was scheduled to appear. He was taken ill yesterday, and he asked me to take his place. He regrets not being here.

The American Family Association is a nonprofit pro-family organization that is dedicated to serving the traditional family values in society, particularly the media. Each month we provide approximately 380,000 copies of the AFA Journal to individuals and churches throughout the Nation. The American Family Association has over 520 local chapters in all 50 states.

In addition, I am also pleased to represent two other organizations, Children's Legal Foundation, a pro-family organization based in Phoenix, Arizona, and Morality in Media, an organization headquartered in New York City.

Much has been said recently about the pollution in our environment with oil spills and environmental pollution. It is a valid concern. However, the greatest pollution of our environment comes not from petroleum or steel industries; it comes from the broadcasting industry.

Last fall, President Bush spoke of a kinder, gentler Nation, and a kinder, gentler Nation begins with the morals and values of that Nation. So much of what has made America great came from the values of good, solid American families, and those family values are now ridiculed and demeaned by the entertainment media.

Hard-core pornographic films air every night on satellite television, on the Exxtasy channel, and the FCC does nothing. In Miami a radio announcer uses the airwaves to solicit young boys for teenage homosexual sex on the air, and the FCC does nothing. In Los Angeles during an early afternoon broadcast, a radio show announcer leads a discussion about how exciting it is to, I quote, "give head," and the FCC does nothing.

Language that the average person would not use behind a barn is now pumped into the living rooms in America and is standard fare on radio and television. Even though Congress has mandated by law in no uncertain terms that the FCC regulate in the area of obscene, indecent, and profane broadcasting, the FCC has ignored the mandate of Congress and allowed the broadcasting industry to serve as a law unto itself. The question is really whether the FCC is above accountability.

In January 1988 a petition was presented to President Reagan asking that the laws pertaining to obscenity and indecency be enforced by the FCC. The petition was signed by 980 leaders from the Christian community, including heads of the three largest religious groups in America. Archbishop John May, president of the National Conference of Catholic Bishops, Dr. Adrian Rogers, president of the Southern Baptist Convention, and Bishop Earl Hunt, president of the Council of Bishops of the United Methodist Church all signed that petition.

Did it accomplish anything? The FCC ignored it, just as they have ignored complaints from hundreds of thousands of other American citizens in the past 20 years. Under the present system the FCC says that anyone complaining about a broadcast or a radio program must send a videotape, or an audio recording, or a transcript of the program. Currently there is one staff person assigned to review this material. As our latest check indicates, that person does not have, on a fulltime basis, either a videotape recorder or a tape recording machine.

The complaints are in the FCC's hands for years. There are approximately 150 complaints with recordings, in many cases the full broadcast, currently pending before the FCC, and no action has been taken on any of those broadcasts.

Two years ago Reverend Wildmon received a call from the FCC, and he was told that the FCC was going to act against station KZKC TV in Kansas City for showing a porn film, "Private Lessons." Two days later the FCC called again and asked him if he could tell them where the complaint was made and the name of the individual submitting the complaint. They did not have a record of who it was that made the complaint.

The FCC later announced that they were going to fine station KZKC $2,000 for this violation of showing the movie. That would amount to about three 30-second commercials. It was a very good public relations move and got an enormous amount of press play, but in reality, the FCC has taken no official action. They never followed through on what they told the press they were going to do.

Members of this committee are fully aware of the possible violations of law by several broadcasters. Our organization has, in the recent past, provided you with a booklet of examples and a videotape of various clips of broadcast television programs.

In closing let me say that I am thoroughly convinced that the FCC will take no action to enforce the law until and unless this committee gives them strong instructions to do so. Whether or not the oversight committees will instruct the FCC, particularly through these confirmation hearings, to fulfill its responsibilities to the American public and to enforce the law remains to be seen.

Thank you, Mr. Chairman.

[The statement follows:]

SUPPLEMENTAL TESTIMONY OF REV. DONALD E. WILDMON
ON BEHALF OF
AMERICAN FAMILY ASSOCIATION, INC.
CHILDREN'S LEGAL FOUNDATION, INC.
AND
MORALITY IN MEDIA, INC.

Our organizations do not specifically oppose any nominee, nor do we specifically support any of the nominees. The position of our organizations is one based upon the need to enforce laws and regulations which prohibit the broadcast of indecent or obscene material and the transmission by cable or satellite of obscene material. I would like to take this opportunity to discuss four different areas of concern with respect to Federal Communications Commission enforcement: broadcast television, radio, cable and subscription television, and pornographic telephone messages.

For the past several years we have identified a steady progression in the type of material which is broadcast on television. Less than twenty years ago it was virtually impossible to find the use of profane language on television and scenes of nudity and simulated sexual intercourse were unheard of. Today, television is replete with every sort of profanity and programs describe or depict every kind of sexual act and perversion.

I have submitted for your information a list of complaints which are currently pending before the Federal Communications Commission alleging violations of the obscenity and indecency laws. Since 1987, the Commission has not acted upon even one of these. I would like to point out that in 1988, the Commission issued a press release stating that it was taking action against station KZKC in Kansas City, Missouri. Despite the publicity, the Commission actually did nothing. The enforcement letter was never sent.

Television is a medium which is an integral part of virtually every American's life. We receive vast amounts of information and are privileged to be able to tune into the instant entertainment it provides. We are also subject, however, to the assaults that are hurled at us by the use of profane language and the portrayal of indecent activities.

I would like to give you a brief summary of the type of material which is routinely found on broadcast television. On October 15, 1988, and December 31, 1988, NBC broadcast an episode of "Saturday Night Live" in which the word "penis" was used over 50 times during a 4 minute skit. Even to those in the broadcasting industry, this program exceeded the bounds of decent television. In a TV Guide description of the scene, reviewer Howard Polskin reported that producer Steve Sohmer believes "the nude beach sketch on Saturday Night Live was an example of TV going beyond the fringe. 'It was the most immature and puerile thing I've ever seen on television', he [Sohmer] says. 'This is the kind of thing that creates viewer backlash. There are people who do this just to offend the audience.'"

On December 1, 1989, NBC broadcast an episode of "L.A. Law" in which a character states, "I feel like such a God damned wimp." To my knowledge, this was the first time a television entertainment program used this type of profanity in its dialogue. This language was a direct assault upon millions of viewers.

From October 30, 1988, through November 1, 1988, NBC presented the television mini-series "Favorite Son". During the six hours of broadcast, there was an average of 21 uses of profanity per hour. In addition, the program contained graphic violence, a scene of sadomasochism, references to group sex and simulated sexual intercourse.

I do not intend to focus on the programming of any one network and these references serve only as illustrations. The other networks have offered similar fare. In each of these cases a complaint was filed with the FCC and no action has been taken.

Broadcast television also airs uncut "R" rated movies. I would like to list a few of the movies that have been shown around the country: "Paradise Motel", "Porky's Revenge", "Texas Chain Saw Massacre", "Animal House", "Taxi Driver", "Lenny", "Friday the 13th", "Private Lessons", "My Tutor", and "9½ Weeks". While children would not be permitted to go into a theater that was showing any one of these films, they may watch them, free of charge, in their own home. To broadcast such material demonstrates a lack of respect for families and indicates the level of irresponsibility found in the broadcasting industry.

In addition, radio programming is replete with "shock jocks". Radio personalities who engage in conversations on topics with the sole purpose to shock and offend a significant portion of the listening audience. These programs feature graphic discussions about sexual intercourse, sexual perversions and excretory functions. Such discussions make George Carlin's "Seven Dirty Words" monologue in 1973 seem like a child's song. A radio station in Miami, Florida, has continued to permit an announcer to use the licensed facility to solicit young boys for sexual intercourse and to describe the details of these alleged exploits over the air. Such discourse is not in the public interest. Even after being notified on several occasions regarding this activity, the Commission has taken no action against the station.

I know that the programmers maintain that if you don't like what is on television, then "just turn it off." But as Justice Stevens stated in the

Supreme Court's decision in FCC v Pacifica Foundation, "To say that one may avoid further offense by turning off the radio when he hears indecent language is like saying that the remedy for an assault is to run away after the first blow. One may hang up on an indecent phone call, but that option does not give the caller a constitutional immunity or avoid a harm that has already taken place."

Broadcast television stations are licensed by the Federal Communications Commission to serve the public interest. The dissemination of indecent material does not serve the public interest. There are those who say that television only satisfies the public's demand in entertainment. There is always a demand for those things which do not benefit society or those things which cause harm to a society. The harm is not eliminated simply because there is a demand.

Congress has vested the Federal Communications Commission with the authority and the responsibility of enforcing the indecency laws. The Commission has consistently refused to do so.

The current nominees have the ability to return the Commission to a powerful force in the regulatory scheme. I am not calling for a return to overregulation by the government. I am calling for the responsible discharge of obligations by the Commission.

Several of the accounts of the current nominees indicate a less than enthusiastic position with respect to the enforcement of indecency laws. In light of the history of the Commission on these issues, organizations which see the need for vigorous enforcement of the law are reluctant to wholeheartedly support such a position. We have been placed in a position of "wait and see." We have no particular opposition to any of the nominees currently before this Committee. What we do oppose is a continuation of inactivity on the part of the Commission.

I would like to set forth several points which are essential to the effective discharge of the Commission's responsibilities as they relate to the enforcement of obscenity and indecency standards. These areas are of specific concern to our organizations and will will actively encourage and support the Commission's efforts in these areas.

The first and second areas of concern involve broadcast television and radio. Our organizations and the people they represent believe that the Commission must vigorously enforce the statutes and regulations prohibiting the broadcast of indecent and obscene material. This enforcement policy includes the imposition of criminal fines and penalties and the use of the available administrative remedies including license suspension or revocation. For too long the Commission has maintained a posture of non-enforcement and the nature of broadcast radio and television has changed accordingly. The Commission can continue to advocate a free-market, minimal regulatory position while it fulfills its responsibilities in the area of indecency and obscenity. The Commission has recently taken the position that the broadcast medium should receive the same legal recognition as the print media does. Even adopting the Commission's philosophy, it would be required to enforce the law prohibiting the broadcast of indecent and obscene material because to treat broadcast the same as print would be essential to treat the two media in the manner described by law as applied to each. The Commission, however, has failed to do so. The Commission's actions have resulted in a rewriting of the law as it applies to broadcast. This Congress has long recognized the differences between various forms of the media and these distinctions have been upheld by the United States Supreme Court. It is not within the authority of the Commission to alter these distinctions. We would ask, therefore, that the laws which have been enacted by this Congress and the regulations promulgated thereunder be enforced by the Commission.

The third area of concern involves pornographic telephone messages. This Congress has identified that telephones are being used to disseminate obscene and indecent messages which are readily available to this nation's young people. Dial-a-porn services make millions of dollars each year by preying upon the curiosities of the young and the weaknesses of adults. The FCC and Congress have made several attempts to protect children from exploitation through these messages, but it is essential that every precaution available be taken. The Supreme Court recently noted that certain safeguards may be sufficient to protect children from such messages. It is imperative that the Commission vigorously pursue the implementation of these safeguards. In addition, should the Commission find that such restrictions are not adequate to protect children, then it should notify Congress and more restrictive means should be pursued if necessary. This course of action is the same one specifically outlined by the Supreme Court in its recent dial-a-porn decision. We would call upon the Commission to ensure that our children are fully protected by strictly following the outline provided by the Supreme Court.

Finally, the Commission has the authority to prohibit the transmission of obscene material over cable or subscription television. We would call upon the Commission to enforce this law vigorously. In many parts of the country a viewer may be shown material which is found in "adults only" theaters or "adults only" pornographic outlets. This same material, if found in a theater or outlet would be the legitimate subject of a criminal prosecution by local or state authorities. If shown through a subscription service, however, it has been virtually untouchable. The Supreme Court has repeatedly stated that material may be obscene without regard to the medium chosen. It is incongruous that material which invades the sanctity of the home, many times uninvited, is given greater deference than that which an adult must affirmatively seek in the marketplace. If vigorous enforcement of obscenity laws is done for no other reason, its accessibility to children should provide a sufficient concern.

In conjunction with these specific areas, I would ask that the Chairman and the members of the Commission be available and responsive to the concerns of the pro-family constituency as they are to those of the broadcast industry. The FCC is the mechanism whereby the interests of the citizens are protected. It is important, therefore, that these interests periodically be brought directly to the attention of the Commission. A line of communication will be essential and we stand willing to work with the Commission as it discharges these responsibilities.

We look forward to working with the new members of the Commission in a positive and productive way. We will not, however, be passive spectators in this effort. We will actively pursue the use of all available remedies to protect society from this harmful material. We know that the enforcement of the laws and the discharge of the Commission's responsibility is a primary concern of us all.

Thank you.

Senator INOUYE. Thank you very much, Ms. Coleman.
Mr. McAteer.

STATEMENT OF E.E. McATEER, PRESIDENT, RELIGIOUS ROUNDTABLE

Mr. McATEER. Thank you, Mr. Chairman.

First, let me express my heartfelt appreciation to you and to your committee for the privilege of speaking to you, and I trust that you will listen not only with your ear but your heart to what I am saying.

I am especially appreciative to my Senator, Albert Gore, who shares the same concerns I do. Unfortunately, he stole some of my thunder. I was going to tell you that I come before you today as a very, very angry man. I want to express my appreciation to Senator Hollings and his wonderful staff, who arranged the details for me to be here.

My name is Ed McAteer. I am president of the Religious Roundtable. The Roundtable is a national coalition of business, military, political, and religious leaders whose focus is public policy concerning moral issues. Further, during the early primaries of the 1988 presidential campaign, going through Super Tuesday, I served in President Bush's campaign with the title of National Director of Christians and Jews for George Bush.

And to give my continuing remarks a little substance, I am a combat veteran. During the second world war my carrier division helped furnish the air support for General Douglas MacArthur on his return to the Philippines, and I had the same experience our President did. I floated in the beautiful blue Philippine sea after my ship was knocked out from under me for about 3½ hours. I am an ex-Golden Gloves champion. I know a little about combat, and we are in a combat today, in my opinion, greater than we had during the second world war. That is from my heart and not just a dramatic statement.

Next, I know little about making laws. I am not a lawmaker. I do not know a lot about technical television, but I do know marketing. I spent 25 years as a marketing sales director of a $5 billion company, the Colgate-Palmolive Company, and I know a little about what sells a product. Number one, there has to be distribution. And there is distribution of the filth that we are talking about here today in America.

We have, through the laxity, the inaction of the FCC, given tons of advertising to the American people to buy that product. Mr. Chairman, I join the 73 percent of the American people which Time magazine reported in its June 12, 1989 issue who are deeply concerned about the moral drift of our Nation.

This 73 percent of the American people recognize the impact for evil which the airwaves are having upon this little piece of geography that represents 7 percent of the world's total land area and has 6 percent of the world's population. They are in favor of controlling the filth which is being spewed across America from the Canadian border to the Gulf of Mexico, from the eastern seaboard to the shores embracing the vast expanse of the Pacific Ocean.

I would remind you, sirs, that you people who are on this committee, whom I know because of your high place in our Nation, have an appreciation of history. I would remind you of Will Durant's observation in his monumental work, "The History of Civilization," that civilizations in the past have not been destroyed by economic, military or political inadequacy, but rather through moral, spiritual decay. And I would also remind you, Mr. Chairman, that Will Durant was not speaking as a Bible believer. His theological position was, put God in a test tube, and I will believe that he is. He was an agnostic. However, very important, Will Durant was a historian. And need I remind you, as leaders of our Nation, you Senators, that if we fail to heed the lessons of history, we will be caught in the same trap.

However, before and more importantly than Will Durant, a wise man named David, thousands of years ago wrote in a book that has vast distribution in the world today called the "Book of Psalms," in Chapter 11, verse 3, that if the foundations be destroyed, what will the righteous do.

I will remind you, Mr. Chairman, you other Senators here, you people who are making these decisions, that a Nation, like a human being, in a sense has a soul, and that the soul of America is being destroyed through a moral collapse. I agree with Billy Graham's wife Ruth that if America continues on its road of moral rebellion without judgment, "God will be duty bound to apologize to Sodom and Gomorrah."

I can assure you that when scores of America's social issues leaders are apprised,—not a threat just a promise, concerning the record of the FCC for the last eight years, they will be outraged at what has happened in the last eight years.

It is no accident that I cannot walk through my den without hearing the same filthy stuff that I heard when I was a sailor on a ship, and as a sales manager dealing with salesmen. I now hear that in my living room. I cannot believe that we can protect a snail darter, and we can have speed limits, and we cannot control this filth. This is absolutely absurd to right-thinking people. I am here to talk about this today, Mr. Chairman.

Leaders will be apprised of the years of misdirection of the FCC concerning moral issues under the leadership of the Mark Fowler-Dennis Patrick regime, and when they do, I am convinced they will be outraged. Yesterday before I came here I spoke to two groups of about a thousand people in Memphis, Tennessee, my hometown, a group of leaders, and I told them that I would be here today.

I did not know what the rules were on citizen band radios until yesterday. One man told me that for 30 years he had a citizen's band radio. Thirty years ago C.B. radios were a pleasure. He said my family, my friends, my children, could listen. But he said there is so much filth on there now that decent people don't listen. He told me that.

Three years ago the FCC removed the requirement for a license to operate a citizen's band radio. In other words, when the perverts want to take over, let them have it. We can regulate a snail darter, but we cannot regulate that which is good for the country.

Any casual observer of history knows that in the tradition of western civilization, conduct rights are earned by responsible moral conduct. Now we see people hiding behind the First Amendment and freedom of speech, and destroying the rights of people who live in a free society. On the other hand, lest you think I am altogether negative, permit me to say that America owes a debt of gratitude to Senator Albert Gore, to Jay Rockefeller, and to Ernest Hollings for their opposition to the FCC's prior position on the Fairness Doctrine, ads on children's TV, and lack of enforcement of the indecency standard, which were upheld by the U.S. Supreme Court.

Also, since I try to be fair give credit to Senators Trent Lott, Slade Gorton, and Jack Danforth for their positions on the Fairness Doctrines.

I appear before you today, gentlemen, to voice my opposition to President Bush's nomination of Mr. Alfred C. Sikes as chairman of the Federal Communications Commission. And in all due respect, Senator, I trust that he will not be confirmed before you go home on recess.

I agree with my colleague; this is something that is too serious to handle in a political way. We are talking about something that 73 percent of the American people are concerned about. Who would deny, that in a very large degree, people will become what they see and what they hear.

Obviously, never before in our 200 year plus history have we been able to hear and to see so much so quickly. Considering the tremendous impact which the airwaves, controlled in a communications sense by the FCC, have for both good and evil in our lives, it is of the utmost importance—and if I had a million tongues and all the vocabularies of all the men who ever lived, I could not properly emphasize, "of the utmost importance"—that the system be directed by a person who not only understands, but really appreciates the problem which Time magazine reports that 73 percent of 250 million people are anxious and concerned about.

My problem with the nominee, frankly, is that he will not address the decency issue. While he appears to be a nice man, to be technically qualified to do the job. He appears to at least some of us, to lack a commitment on the paramount issue facing the Nation which fall under the FCC's jurisdiction; thus, he should not be deemed qualified to be FCC chairman.

This is not a small matter, need I remind you, that we are talking about. On those grounds alone there is a deep suspicion, at least among some pro-family groups, that the FCC under Sikes will continue in the same direction as under the Fowler-Patrick tenure; that Sikes, if not a protege of the Fowler-Patrick deregulation dynasty, at least is of the same mindset.

Mr. Sikes' failure to take any public positions on the decency issue while being vocal on other FCC-related matters may indicate an innate reluctance to deal with this matter at all. Sikes' positions on matters such as HDTV, telephone company centering cable systems markets, as well as his positions, or lack thereof, on decency, Fairness Doctrine, children's TV, are a matter of real concern.

If there was only one person in America—and I am not the only one—I would have a problem with this appointment. When I hired trained, motivated people with Colgate-Palmolive, whatever all of that means, I did not put a person in a responsible position hoping that he was going to do a good job. We had to know, if it was an important job, if the person was committed. I believe from the standpoint of communications; Mr. Sikes is prolific. But I am not convinced that he has a commitment on the issue which many of us believe is the paramount issue.

I would suggest that you Senators take time, go home, go where I do, to the drugstore, out into the marketplace and ask people what they think of what is happening on TV today. I can guarantee you that when I was sales manager with Colgate-Palmolive Company, if Procter and Gamble—and they were tough people—took a 5 percent share of our market, I answered for that.

Now, and I am going too long, I told you that I am angry. The average American would be outraged if he knew how many times he has been manipulated by Madison Avenue gimmickry and power press agentry into violating his biblical convictions, surrendering his sovereignty, and putting people who do not share those convictions in places of power.

Add to this the sheer size of the mountain of facts that one must scale, and it is easy to see how people who have genuine concerns about the moral direction of America are often outmaneuvered. At this critical juncture in the history of our country we need more than just a collection of facts, but a road map for the journey back to our lost Judeo-Christian heritage, our fated freedoms, and the moral, spiritual roots that once nourished America's families and made her great.

I am concerned—many of us, of the past leadership of the FCC which has adopted, as my colleague Ray said, a laissez-faire policy of inaction and nonregulation, undermined the concept of regulating the airwaves for the public good, avoided its congressional mandate to enforce the broadcast law, failed to provide leadership on decency and obscenity, looked the other way as indecency was commonplace on radio and television, made speeches about lifting all controls from programming content—a policy that has encouraged pornographers to take more liberties and allow them greater access to the American homes.

Let me say, Senator, as a businessman I can appreciate the free enterprise system. I believe in it. I believe that the marketplace, better than the bureaucracy, knows how to distribute goods. But I am appreciating the fact that even though the airlines have deregulated fares, that they still regulate protection and have me go through that little scanning device that sees whether or not I have a bomb or a pistol in my pocket.

And so I do not think we have our heads screwed on right when we talk about deregulating television to let the obscenity junk go across this country; psychologists, preachers, businessmen, or even an agnostic will tell you it is tearing up this country. The FCC has been totally ineffective in stopping Dial-A-Porn, consistently passed the buck to the Justice Department and local communities, interpreted FCC laws and regulations to protect the communications interest.

It has allowed market decisionmaking to reduce programming to the lowest common denominator, abdicated its responsibility for protecting the Nation's children. I have two all-American boys, two beautiful daughters-in-law, six little grandchildren, I admire Patrick Henry and some of the other early heroes. I do not want my grandchildren to grow up and ask the question, what did my grandpa do to save our country during his lifetime.

In their zeal to deregulate the communications industry, past FCC leadership worked to dismantle a public agency which has been mandated by Congress to protect and regulate the airwaves for the public good. In decrying both the public good concept and any attempt to control programming content, they have laid the groundwork for erasing a 55-year tradition of regulating decency standards on radio and television. The result, and need I remind you, is a deluge of deviant, violent images that are corrupting our children.

Let me give you, as I am heading into closing now, a report that I received yesterday from John Beckett, the president of Intercessors for America.

His report is 15,000 to 20,000 adult bookstores in America more adult bookstores than there are McDonald hamburger stands; 5,000 adult theaters, 2 million adults a week attending porn direct mail volume, $3 billion annually; 350 child porn videos annually; 20 percent of all video sales, X-rated.

You might ask, what does that have to do with FCC? Just this the product is there, and if we, through the public airwaves, encourage people to buy that product, then we are remiss in our responsibility.

What the FCC and its leadership says is sometimes deceptive, but the real problem is what it does. When I was running the Colgate sales force, we operated on the principle of results, the end result, get the order. And the results of what has happened through the airwaves in the last eight years is very obvious.

Some have suggested—that the leadership of the FCC needs to be served with a writ of mandamus, a judicial order to carry out their duties and enforce the law. In conclusion, because it is believed that the direction of the FCC would remain basically the same under the leadership of Mr. Sikes as it has under the Mark Fowler-Patrick regime, I urge you, Mr. Chairman, and this committee as a minimum, to go home before this confirmation is made a fact.

Now, in conclusion, and believe me when I tell you that.

My wife is an English teacher and she said that in one of Shakespear's poems was the statement, "words, words, words. You never run out of words." But I have a heartful today. Let me share this one thing as I close.

I am a constant, unashamed reader of the Bible, I came across something in the last ten days, Senator Gore, that I had never seen, and I know you appreciate the Bible.

In the 78th Psalm, verse nine, I read this. Psalm 78.9. "The children of Ephram, being armed, and carrying bows."

To me that says they were ready to go to war. But notice the tragic refrain, "They turned back in the day of battle."

My prayer, Senator, my urging to you and the Committee is, do not turn back in the day of battle. Look at the problem that is in America. This is not a small thing. Ask 73 percent of the American people. Check with Time magazine's marketing figures and see if we are correct. Thank you so much for your indulgence.

[The statement follows:]

July 1989

U. S. SENATE CONFIRMATION HEARINGS FOR CHAIRMANSHIP OF FCC

TESTIMONY OF E.E. McATEER, PRESIDENT OF THE RELIGIOUS ROUNDTABLE

My name is Ed McAteer. I am President of the Religious Roundtable. The Roundtable is a national coalition of business, military, political and religious leaders whose focus is public policy concerning moral issues.

Further, during the early primaries of the 1988 Presidential campaign going through "Super Tuesday," I served in President Bush's campaign with the title of "National Director of Christians and Jews, Bush for President."

Gentlemen, I am very grateful and deeply humbled with the opportunity and privilege to testify before you very important leaders of our country concerning this very critical nomination of FCC Chairman. To that end, my mind and spirit travels back down through the corridors of time some two thousand years and joins the mind and spirit of the Apostle Paul as he stood before King Agrippa, the Roman ruler of Israel and spoke as recorded in the 26th chapter of the Acts of the Apostles, "I think myself happy King Agrippa because I shall answer for myself this day touching all these things, especially because I know thee to be expert in all customs and questions concerning this matter, wherefore I beseech thee to hear me patiently."

Gentlemen, I join the 73% of the American people, which TIME magazine reported in its June 12th 1989 issue, who are deeply concerned about the moral drift of our nation. This 73% of the American people recognize the impact for evil which the airwaves are having upon our land, and further, they are in favor of controlling the filth which is being spewed across America from the Canadian border to the Gulf of Mexico, from the eastern seaboard to the shores embracing the vast expanse of the Pacific Ocean. I would remind you Gentlemen, whom, I know because of your high place of leadership in our great nation have an appreciation of history -- I would remind you, Sirs, of Will Durant's observations in his monumental work, "The History of Civilization," those observations being, that in the broad sweep of history, all past civilizations have fallen, not because of economic, political, or military reasons, but rather, primarily because of moral spiritual decay. I remind you, Sirs, Will Durant was speaking, not as ~~a bible~~ believer but rather as an agnostic -- but very importantly ... as a Historian.

I would remind you, Sirs, if you need to be reminded, that a nation, in a sense, like a human being, has a soul -- and that the soul of America is being destroyed through a moral collapse. I agree with Billy Graham's wife, Ruth -- "If America continues on its road of moral rebellion without judgment, God will have to apologize to Sodom and Gomorrah." I can assure you, Gentlemen, that when scores of America's social issues' leaders are apprised, and they will be, of the years of misdirection of the FCC concerning moral issues under the leadership of the Mark Fowler-Dennis Patrick regime they will react in moral outrage.

On the other hand, America owes a genuine debt of gratitude to Senators Gore and Hollings for their opposition to the FCC's prior position on the Fairness Doctrine, ads on children's TV and lack of enforcement of the indecency standards which were upheld by the U.S. Supreme Court in FCC vs. Pacifica (1978).

I appear before you today, Sirs, to voice my opposition to President Bush's nomination of Mr. Alfred C. Sikes for Chairman of the Federal Communication Commission. Who would deny that, to a very large degree, a people will become what they see and what they hear? Obviously, never before in our two hundred plus years history have we been able to hear and see so much so quickly. Considering the tremendous impact which the airwaves controlled in a communications sense, by the FCC, have for both good and evil on our lives, it is of the utmost importance that the system be directed by a person who really understands the problems which TIME magazine reports that 73% of America's citizens are anxious about.

My problem with the nominee is that he will not address the decency issue. While Mr. Sikes appears to be "technically qualified" to become FCC Chairman, he appears to FCC observers to lack a commitment to the paramount issues facing the nation which fall under the FCC's jurisdiction. Thus, he should not be deemed qualified to be FCC Chairman. On those grounds alone there is a current deep suspicion among pro-family groups that the FCC under Sikes will continue in the same direction as under the Fowler-Patrick tenure, that Sikes, if not a protege of the Fowler-Patrick "deregulation dynasty," at least, is of the same mind-set. Mr. Sikes' failure to take any public positions on the decency issue, while being vocal on other FCC related matters, may indicate an innate reluctance to deal with this matter at all. Sikes positions on matters such as HDTV, telephone companies entering cable systems markets, as well as his positions (or lack thereof) on decency, Fairness Doctrine, children's TV are a matter of real concern. Further, I have deep, if not, insurmountable reservations about anyone in this strategic position which affects the national health of America in the areas of promiscuous sex, pornography and other moral issues who have either the backing or the blessings of the Lee Atwaters and/or the Doug Weads of our world.

I have an abhorrence for those politicians who covet and court the pro-family vote and then move in to places of leadership people who take positions counter-clockwise to our concerns.

They wear out the timeworn phrase, "I am personally opposed but ...." They remind me of our American Indian friend who said, "white man speaks with forked tongue."

The average American would be outraged if he knew how many times he has been manipulated by Madison Avenue gimmickry and power press agentry into violating his Biblical convictions, surrendering his sovereignty and placing rascals in places of power. Add to their surreptitious strategies the sheer size of the mountain of facts that one must scale and it is easy to see how people who have genuine concerns about the moral direction of America are often outmaneuvered.

I believe George Washington had moral character in mind when he said that the primary responsibility of leadership is to raise a standard so that when the wise and honest want to, they can repair to it.

At this critical juncture in the history of our country we need more than just a collection of facts, but a roadmap for the journey back to our lost Judeo-Christian heritage, our faded freedoms and the moral/spiritual roots that once nurtured America's families and made her great.

The past leadership of the FCC has:

Adopted a laissez-faire policy of inaction and nonregulation; undermined the concept of regulating the airwaves for the public good;

Avoided its congressional mandate to enforce the federal broadcast law;

Failed to provide leadership on decency and obscenity matters, and looked the other way as indecency has become commonplace on radio and television;

Encouraged ownership to become concentrated in the hands of fewer people;

Served private rather than public interests;

Made speeches about lifting all controls from programming content -- a policy that has encouraged pornographers to take more liberties and allowed them greater access to the American homes;

Paved the way for hard-core pornography on cable and subscription television; totally ineffective in stopping "Dial-a-Porn."

Opened up broadcasting to hidden ownership and organized crime by eliminating character references for broadcast license holders;

Ignored complaints and dismissed important cases without action against violators;

Consistently passed the buck to the Justice Department and local communities;

Interpreted FCC laws and regulation to protect the communications industry;

Allowed important laws to become inoperable by declaring them inapplicable;

Promoted industry self-regulation when it has already proven a failure;

Allowed marketplace decision-making to reduce programming to the lowest common denominator;

Discouraged creative elements in broadcasting;

Abdicated its responsibility for protecting the nation's children;

Failed to follow the Reagan Administration's lead in returning to traditional family values;

Following is part of an executive summary by the Florida Coalition for clean cable. This summary was prepared to pinpoint facts and failures of the past leadership of the FCC:

In their zeal to deregulate the communications industry, past FCC leadership worked to dismantle a public agency which has been mandated by Congress to protect and regulate the airwaves for the public good. In decrying both the public good concept and any attempt to control programming content, they have laid the groundwork for erasing a 55-year tradition of regulating decency standards on radio and television. The result is a deluge of deviant and violent images that are corrupting our children.

We are not opposed to deregulation efforts as they relate to the direct economic power of the commission except where they foster concentration of power in a media elite. We are very concerned about the lack of enforcement of provisions which protect the public in the areas of health, safety and welfare. The FCC during the past few years, when the need for enforcement has become greater than ever before, has ignored this responsibility. Pornography has invaded cable and telephone communications. Independent broadcast networks show uncut R-rated movies. Obscene rock music lyrics are permitted on radio and standards on network television continue to deteriorate. Official FCC policy, numerous examples of which are documented, has been "inaction," "nonregulation," "passing the buck," and overprotection of the industry.

DEVIANCE FOR FREEDOM: AN UNACCEPTABLE TRADE-OFF

The results of FCC deregulation of the electronic communications industry have been devastating. The revitalization of broadcast, cable and music television has come at the cost of seriously undermining traditional standards of decency in America. Deregulation policies have also concentrated the ownership of broadcasting in the hands of a very few people. The further elimination of character examination for owners of broadcast licenses now casts doubt on who those few people might be. The door is opened to hidden ownership, particularly that of organized crime.

CONCENTRATION OF OWNERSHIP -- LESS SPEECH RATHER THAN MORE SPEECH

The FCC's relaxed ownership rules have led to a wave of buying, selling and merging broadcasting properties. The only consideration has been profitability. As more combinations have formed, fewer and fewer people have come to own more and more stations. Editorial control of the electronic media has been concentrated in the hands of a small group of media conglomerates who are crossover owners of not only television and radio stations, but newspapers and magazines. The result, for Americans who cannot afford to buy a television or radio station of their own, is less speech rather than more speech. (Broadcasting, 12-9-85) (Nation, 9-1-84)

While past leadership advocated free speech for broadcasters, they fight fair speech for the American public. They said the Fairness Doctrine which the Supreme Court ruled permissible under the First Amendment (Red Lion decision) is a disincentive to free speech if broadcasters are forced to present the other side. (U.S. News & World Report, 4-12-82) They thus opposed giving equal time to minority groups who would not otherwise have an opportunity to be heard.

Their policy of maximizing the freedom of action of broadcasters in the marketplace is removing from others an important means of expressing ideas. The rights of 240 million people are being squelched on behalf of a few corporations." (CNN's Crossfire as quoted in Broadcasting magazine, 5-14-84)

FCC IGNORES MANDATE OF CONGRESS

The FCC has been mandated by Congress to regulate the airwaves for the public good and to enforce the federal broadcast law. Congress has given the FCC the authority to revoke licenses, to issue cease and desist orders and to levy fines, in order to regulate the broadcasting of "obscene" and "indecent" and "profane" programming.

Section 1 of the Communications Act of 1934 (as amended, Title 47 U.S.C.) created the Federal Communications Commission to enforce the federal broadcast law.

> "For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all people of the United States a rapid, efficient, nationwide, worldwide wire and radio communications service with adequate facilities and reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communication, and for the purpose of securing a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce in wire and radio communication, there is hereby created a commission to be known as the 'Federal Communications Commission' which shall be constituted as hereinafter provided, and which shall execute and enforce the provisions of this act."

The FCC has failed both to uphold broadcasting standards, and to operate the airwaves for the public good. In his public speeches, past chairman Fowler decried the public good concept, asserting that decisions should be left to the marketplace. Under his leadership the FCC carried deregulation to such extremes, it significantly undermined the concept of public decency. The FCC appears, almost deliberately, to be trying to legalize pornography on television, the most pervasive medium in the country and the most intrusive in the family setting. A U.S. News and World Report article (6-18-84) stated that under the Fowler formula, American TV would be the most undisciplined in the world.

The present FCC has avoided its mandate to enforce Section 1464 of Title 18 by refusing to review obscenity cases. It has consistently interpreted the FCC laws and regulations most favorably to the industry, in many cases arbitrarily declaring them inapplicable, and therefore, giving the industry carte blanche to do whatever they want.

The FCC has carried the deregulation mentality to such an extreme, it has seriously deviated from the Republican platform of this administration. As President Reagan tried to lead the country back to pro-family values, FCC policies allowed sexual license and perversion to enter every home in the nation through television.

FCC POLICIES; "PASS THE BUCK," "INACTION," "NONREGULATION"

While the mandate to enforce decency standards has been given specifically to the FCC, the agency has consistently said it will not consider a case until a local community brings a conviction under local community standards, but local officials have no authority to enforce federal laws. No local community in the nation has an ordinance against indecent broadcasting which could be enforced at the local level. Citizens who fail to get action on the local level turn in desperation to the FCC, but the FCC replies it can do nothing until the city brings a conviction.

Experts believe there is no way that cities, states, municipalities or the United States Department of Justice could apply any of the above sanctions either for obscenity or indecency. Congress established a statuary scheme for the FCC to develop and implement. Neither deferral to local juries nor to the Justice Department was intended by Congress and would, in effect, frustrate Congressional intent.

The buck, in short, cannot be passed to the cities and states -- first because that was not Congressional intent; secondly, because the Dumont Case says they are preempted; and thirdly, because there is not a city or state in the United States that has a law or ordinance regulating (or that could be construed to regulate) "indecency" on radio or broadcast TV. In other words, there is no way that "locals" can determine the "Community Standards" for the benefit of the FCC.

Nor can the FCC pass the buck to Justice for the following reasons:

The statutory scheme makes the FCC the prime mover;

Justice says in their United States Attorney's manual that the FCC and not Justice will handle;

The F.B.I. has similar instructions;

There is no authority in Justice to apply the civil sanctions previously mentioned.

"Since the FCC has primary jurisdiction, there are serious questions of fairness in the Justice Department to charge a broadcaster with a crime based on conduct the FCC permits." (Letter from Steven E. Holtschoser, Assistant U.S. Attorney to Jerome P. McAtee, 4-30-86)

FCC RESPONSE TO CITY AND STATE STRUGGLES INADEQUATE

When the Playboy Channel came to Florida's Brevard County, every cable-ready set in the area received the full audio and full video whether they ordered it or not, in spite of continued advertising that no home would receive it unless it specifically subscribed to the Channel. Citizens' only recourse was to ask the cable company to scramble all the mid-ban channels, many of which they wanted. Three years later they still receive the complete audio which consists of groans, moans, heavy breathing and sexual profanity. The picture unscrambles periodically to reveal tangled naked bodies gyrating and thrusting.

An incompletely scrambled signal exposes all homes in areas which offer the Playboy Channel. Though the bodies are somewhat disjointed, enough can be seen to figure out what is going on. In Arizona it has given rise to a new teenage pastime called "Picasso Porn." Like a video game challenge, children watch the inadequately scrambled picture intently to see just how much they can see.

One Brevard County citizen carried on an extensive struggle with local authorities and continually sought help from the FCC. The FCC refused to look into it, replying only that the case was not subject to commission action and that it was up to the local community to deal with decency standards. Surely the national protector of our airwaves should offer more help to troubled cities, particularly since only the FCC is authorized to deal with matters of obscenity and indecency.

Tired of waiting for the FCC to act to clean up cable programming, another Florida county sought to combat the problem of increasing obscenity on cable. Collier County Commissioners asked their attorney to draw up a county ordinance allowing cable obscenity cases to be handled in an efficient civil procedure. But the State Attorney General ruled in April, 1986, that the state obscenity statute preempted local communities in the matter of obscenity ordinances.

Clearly the FCC cannot have it both ways. If local communities and states cannot pass statutes to enable them to control decency and obscenity, violations on radio and television, then the FCC cannot wait to act until local communities bring convictions. Congress needs to make it absolutely clear that cable is under FCC control. Mark Fowler has, in effect, challenged Congress to do this when he said in Broadcasting (4-30-84), "The only way that Congress can really change what an agency does, definitively, is to pass legislation that countermands certain agency actions, or modifies or promulgates something that the agency might not have done on its own."

INDUSTRY PROTECTION MORE IMPORTANT THAN THE PUBLIC GOOD

A repeated theme in FCC policy is reluctance to do anything that would have a chilling effect on a "fledgling industry" or impede its growth. Calling the cable industry a "fledgling industry which needs nursing," the FCC refused to hold local hearings in Melbourne, Florida to see how widespread public resistance was to the Playboy Channel. They did not want to create a chilling effect or intimidate the industry. (H.C. Williamson notes on meeting with FCC, 10-5-84) It would seem that protecting industry profits is the concern of the FCC rather than the public interest. Cable is now well-established and its adult channels rely heavily on pornographic films. The largely organized crime-controlled, 8 billion dollar-a-year pornography industry is well established. The FCC appears to be more concerned with protecting the pornographer's access to the home and the high profits of the cable industry than it is the public's concern over the ill effects of obscene and indecent materials on its children.

FCC PREEMPTION OF LOCAL AND STATE AUTHORITY

The FCC claims that new technologies within the national communications network are subject to federal regulation only. According to an article on Private Cable by Mark Tauber, the Commission "sent a clear message to state and municipal agencies that it would not tolerate any regulation that would hinder the growth and development of other new communications technologies ... The FCC expressed its concern that the 'patchwork quilt' that would result if regulation were left to state and local governments might well contravene the public interest by stifling a developing industry."

By attempting to preempt the field, the FCC bears a responsibility to prevent violations of obscenity and indecency laws and regulations within that field. The FCC, however, chooses not to do so. A complaint filed by a Windham, Maine community group claimed that the local cable television franchise's showing of the Playboy Channel violates 47 C.F.R. Section 761215 which prohibits the origination cablecasting of obscene and indecent material. The FCC refused to take action until a finding of obscenity was determined by a local court of competent jurisdiction, applying contemporary community standards. As has already been established, such finding is attainable by the FCC

THE CASE OF ON-TV -- AN FCC FRAUD

For five years, Attorney James J. Clancy monitored the transmission of pornography on ON-TV and Select TV on pay television channels 15 and 52, in Los Angeles and Phoenix. When the license of station KNVX-TV, Channel 15, in Phoenix came up for renewal (10-1-83), he filed a petition for denial of renewal of license with the FCC and informed them that hard-core pornography (the equivalent of obscenity) was being transmitted on Channel 15 as a regular course of business. Nearly a year later (8-17-84), the FCC advised him that because he was only in the process of purchasing a residence in Phoenix, he did not have standing to file a petition and the case would be dismissed without any FCC action. Oak Industries who owned the channel was permitted to sell it for $10,500,000.

When the license of the Glendale, California station, Channel 54 came up for renewal (12-1-83), he again filed a petition for denial of renewal with the FCC. He submitted extensive time and motion studies of the following examples, explaining that only the penetration scenes had been removed;

1) THE OPENING OF MISTY BEETHOVEN
2) SEX WISH
3) EASY
4) TALK DIRTY TO ME
5) VISTA VALLEY P.T.A.

The FCC denied the second complaint in January of 1985 and did not notify Mr. Clancy until December, 1985, two years after it had been filed. The pretext was that the content of these movies was pending before the appropriate Federal court. According to Bruce Taylor of Citizens for Decency Thru Law, this was totally untrue. Taylor had asked a Federal court to take jurisdiction and review the content, but it had refused and the FCC knew it.

This was a total abandonment of their Federal mandate. The FCC had absolute jurisdiction because this was broadcast television, not cable transmission. According to Mr. Clancy and Mr. Taylor, they were fully informed of the content and they permitted the broadcasting of obscene material that was worse than anything that has ever been shown on cable.

Oak Industries has since sold its interest in ON-TV which continued to show the same type of programming. Mr. Clancy testified before the Senate Subcommittee on Criminal Law (7-31-85) that "the FCC inaction will permit the prime movers responsible for the introduction of hard-core pornography to television to escape responsibility for their criminal actions and to make a healthy profit to boot."

During the period the FCC sat on the petition, Clancy said Oak Industries steadily increased the grossness of its hard-core pornography transmissions. He claimed that FCC inaction wrongly sent a message to the public that "such subject matter is 'free speech' and entitled to constitutional protection." "As a result, other telecasters like the Playboy Channel have followed suit and are now telecasting the same brand of hard-core pornography that was originally transmitted by ON-TV in 1981." Through their inaction, the FCC has actually granted the pornographers access to the American home. (Statement of James T. Clancy before the Senate Subcommittee on Criminal Law, 7-31-85)

Evidence that this message is being received and acted upon is a July, 1986 press release by the National Alliance for Freedom, a division of Adult View Corporation. Adult View Pay Cable Television will offer "25 hard-core films per month," and the "best of 'slice and dice' R-rated terror films." It will challenge all current state obscenity laws on the grounds that they are an illegal and unconstitutional form of thought control.

THE VIDEO 44 CASE -- FCC WITHDRAWS FROM OBSCENITY RULING

The FCC rejected the Chicago Video 44 case in which the presiding Administrative Law judge denied the television renewal application of Video 44 and granted the competing application of Monroe Communications Corporation to establish a new television station. One of the two key issues in the case was whether the station had transmitted obscene programming, and if so, what effect that should have on its qualifications to be an FCC licensee.

Video 44 argued that offering adult hard-core pornography "in response to consumer demand" was grounds for granting license renewal. The challenger felt otherwise. To quote from the case, "some might doubt the wisdom of retaining the license in the hands of an entity whose 'movie editor' is depicted as follows; the only subject matter that Mr. Stand would exclude ... was sex involving animals ... he would not rule out, for example, a homosexual activity known as fist fucking." (Tr. 1143-44 Monroe BR. at 22-23)

Mr. Fowler said in a letter to the Editor, (Electronic Media, 127-86) "If it is what the public wants, no matter who's broadcasting it, it serves the public interest." Consistent with his belief that if a broadcaster wants to show any sort of material and someone wants to watch it, they should be free to show it, the FCC took the case away from the Administrative Law Judge who ordered a hearing into the obscenity issue, and removed the matter of obscenity from any consideration whatever. After admitting it had the authority to rule on such a matter, the FCC said "upon reflection" it believed it should exercise "greater restraint" in this area and not "attempt to determine whether programming is obscene, but rather, should defer to local authorities." (Broadcasting, 4-21-86) The reason given for refusing to consider the obscenity issue was concern that "this could lead to taking an unduly restrictive view of adult-oriented programming." (Broadcasting, 4-21-86) Again it raises the question, is the FCC working to protect the public interest or that of the adult film industry?

CHILD PORNOGRAPHY REACHES CABLE

In July, 1986 it was discovered that Traci Lords made 75 films for the pornography industry between the ages of 15 and 18. (The DCL Reporter, August/ September 1986) According to Mr. Clancy some of these films have been shown on adult channels. Fowler's inaction has finally resulted in bringing the hard-core pornographic performances by a minor to home television.

SUPREME COURT UPHOLDS OBSCENITY AND INDECENCY

The New York vs. P.J. Video, Inc. case decided April 22, 1986 dealt with video-cassette movies which have also been shown on cable television. Supreme Court Justice Rehnquist said it was "clear beyond peradventure" (beyond doubt) that (there was) "probable cause to believe that the five films at issue were obscene under New York Law." (New York V. P.J. Video, Inc. 89 L Ed 2d 871, p. 881)

The Supreme Court has looked at descriptions of films (at least two of which, All American Girls and California Girls, according to Attorney James J. Clancy, have been shown on television) and said it is clear beyond doubt that anyone who reads the synopses would have reasonable cause to believe they are obscene.

In the 1978 case of FCC vs. Pacifica Foundation, the Supreme Court recognized "indecency" as a separate legal standard for broadcasters enforceable by the FCC. Although courts have said local cable operators (local cable companies) are not broadcasters, the federal statute (Section 1464 of Title 18 of U.S.C.) and the Communications Act of 1984 prohibits cable programmers who are broadcasters (like Playboy Channel) from providing indecent or obscene programming by radio communication (i.e. Satellite).

INDUSTRY SELF REGULATION -- A DISMAL FAILURE

Again and again the FCC suggests directing comments on programming considered objectionable to the stations and networks involved. However, emboldened by the laissez-faire attitudes of the Commission and their drive to expand First Amendment rights, the stations and networks have ignored citizen complaints or sent back a curt card saying "others do not agree with you."

CREATIVE COMMUNITY ENDANGERED

Recommending self-regulation, an FCC memorandum states that interference in sensitive programming judgments could discourage creative developments. But voices within the creative community such as David Levy, Executive Director of the Caucus for Producers, Writers and Directors, Los Angeles, are beginning to speak up for a return of standards, for fear the creative element will suffocate under the onslaught of smut and sleaze that is overtaking the entertainment media. Says Levy, "We view his years on the FCC as a disaster for the public good and as a gigantic windfall for private interests." By "his crass dismissal of public trusteeship," Fowler is saying "television is simply another business with all decisions to be based upon the marketplace - a concept that dismisses responsibilities on the part of broadcasters to serve the public interest first." Levy worries about the effect of such a policy on children's programming, fair presentation of all sides of public issues, community standards and program content. (Broadcasting, 3-12-86)

BROADCAST TELEVISION COMPETES FOR ADULT CABLE AUDIENCE

Because of the addictive nature of pornographic material, the showing of pornographic movies on adult cable stations has led to the creation of an audience willing and eager to watch this type of material. In order to compete for this audience, independent broadcast channels are now showing uncut versions of R-rated movies. When questioned about showing the movie below, the production manager admitted "the spread of cable television and its uncut movies" was the reason they were "running movies that aren't watered down and cut." (St. Louis Globe Democrat, 2-24-86)

> A CASE: An uncut version of the R-rated LOOKING FOR MR. GOODBAR was shown on KPLR Channel 11, a regular broadcast television station in St. Louis, Missouri. It contained "oral sex," orgies, violent rape and constant nudity." (St. Louis Globe Democrat, 2-24-86) A complaint was made to the local U.S. Attorney. He replied, "There are serious questions of fairness about charging a broadcaster with a crime based on conduct that the FCC permits." (Letter from Steven E. Holtshouser, Assistant U.S. Attorney to Jerome P. McAtee, 4-30-86)
>
> The messages presently emanating from the FCC: The federal broadcast law is no longer enforced; showing obscenity, indecency and profanity is no longer a crime; no action will be taken, so show anything you like.

The result is the showing of uncut R-rated movies on independent channels in many parts of the country. In Florida four East Coast channels have experimented with this policy, showing full-length uncut R-rated movies as early as 8:00 p.m.

SOME EXAMPLES:

Channel 39 WDZL, November, 1985
DRESSED TO KILL -- featuring sex, nudity and profanity
DON'T ANSWER THE PHONE -- a cheap slasher movie with much profanity
DEATH WISH II -- described as bloody goulash and featuring gang rape
A newspaper article (Miami Herald, 11-22-85) bragged Channel 39 shows just about everything; strong language, frontal nudity, sexual situations and violence.

Channel 29 WFLX has been showing unedited movies for 3 years. Examples are: TAXI DRIVER (November, 1985) and ANIMAL HOUSE (July, 1986)

NUDITY AND INDECENCY ON PRIME TIME

The argument is made that you cannot reduce the adult population to seeing only that which is fit for children, therefore, we must have a more lenient standard for cable. In practice what is happening is that the extremely lenient standard which has evolved from lack of appropriate action against pornography on cable is reducing all programming to that which is unfit for children. The acceptance of sexuality explicit and excessively profane programming on cable has emboldened independent channels to break down broadcasting standards. This, in turn, has prepared the way for the networks to follow suit. Already illicit casual sex is the mainstay of daytime soap operas and prime time sagas. Flashes of nudity and sex acts under the sheets are just a step away from the full disclosure of cable. An article from a Mississippi newspaper (Picayune Item, 1-31-86) provides the following descriptions from TV Guide:

> "TV Guide offers vivid illustrations of television's moral bill of fare. Full-page ads tout the following made-for-TV movies: CLUB MED (the ad pictures a nubile creature in tank top and microscopic g-string strolling in the surf, with the teaser, "If all you want is everything ..."); PASSION FLOWER ("a story of seduction and deception, "Bruce Boxleitner and Barbara Hershey are locked in a steamy, full-page, quarter-clad embrace); and PRINCE OF BEL AIR, the copulatory adventures of a pool cleaner with a stud service on the side ("And wherever he goes, he leaves the cleanest pools, and the happiest customers in town.")

While we recognize that the FCC cannot reply to citizen complaints about every soap opera and prime time saga, their permissive policies and inaction against those who pushed the outer limits of decency has resulted in such a deterioration of standards generally that the only way parents can keep their children from receiving a corrupted view of human sexuality is to keep them from television altogether. In our culture today this is a nearly impossible task.

INDECENCY ON RADIO

Radio has not escaped the onslaught of indecent material. In St. Louis two men laughed throughout a recital of 388 pet names women have for the male reproductive organ on a program entitled, "Morning Zoo" that was heard at 9:00 a.m. (I.C. Corcoran KSHE FM 94 7, 5-22-86) They said they were eagerly expecting Playboy Magazine to reprint their list which included such names as crotch king, drill sergeant, electric eel, frozen water pipe, golden shower head, high hard one, moist mushroom, naughty noodle, virgin surgeon and wrecker.

The profanities and sexually explicit lyrics of rock music provide thousands of violations of the broadcast decency standards every day. To name but a few:

> Prince's "1999" features oral sex, masturbation and incest.
> Rolling Stones' "Too Much Blood," a take-off of the Texas Chainsaw Massacre, is about chopping a woman's head off, putting her pieces in the refrigerator, then taking them out and eating them.
> Cindy Lauper's "She Pop" encourages masturbation for teenagers.
> Prince's "Dirty Minds" features incest in a song called "Sister" and oral sex in a song called "Head." His "Purple Rain" is about "a girl named Nikki -- a sex fiend" who he "met in a hotel lobby masturbating."
> Motley Crue's "Ten Seconds to Love" is about group sex and pornography.
> Judas Priest's "Eat Me Alive" is about oral sex at gunpoint.

A NEW PROBLEM; DIAL - A -PORN

The FCC's lack of action has created a whole new problem: dial-a-porn. When dial-a-porn first appeared, a case was brought to the FCC (by Peter F. Cohalen) alleging that New York Telephone Company violated 47 U.S.C. Section 223 by permitting High Society magazine to use telephone company facilities to transmit obscene messages. Following the normal pattern, the FCC dismissed the complaint and referred it to the Department of Justice which referred it back to the Commission for administrative action. The FCC interpreted the existing statute, Section 223, as not applying to dial-a-porn and testified before Congress that it could not be used to prohibit adults from calling dial-a-porn numbers. Congress then amended Section 223 and required the FCC to issue regulations within 180 days restricting only minors' access to telephone sex, thereby making obscene calls legal for adults for the first time in the history of our country. FCC attempts to date have produced no practical results in keeping dial-a-porn messages from children. While they have spent endless hours investigating time restrictions, flawed screening and blocking techniques, message scrambling, access and identification codes and problems with coin operated telephones, thousands of children have become addicted to telephone sex, their minds polluted and filled with material most adults would recoil from in horror.

This is the first criminal statute that provides a defense for the offender, allowing a dial-a-porn company to provide the service to adults or minors as long as they comply with FCC regulations. In the meantime, there are no prosecutions against known criminal behavior; even the Justice Department agreed not to prosecute until the problem was resolved. Throughout the proceedings, the concern has been to protect dial-a-porn providers and adults' rights to receive obscene and indecent material rather than the government's compelling interest to protect children. Had Fowler and the FCC moved quickly to stop dial-a-porn at its inception through the use of Section 223, which it easily could have done, this insidious type of pornography could have been avoided altogether.

RESULTS: THE PROTECTOR OF THE AIRWAVES HAS CEASED TO PROTECT

Obscene programming, which has no Constitutional protection whatsoever, and indecent material, which is offensive to the majority, is being shown on cable. Competing for the cable audience, independent broadcast channels are showing uncut R-rated movies. If FCC inaction continues, commercial television would have a green light to show what is already appearing nightly on adult pay cable channels.

Our children would be bombarded daily with multiple messages that promiscuous and deviant sex is normal and expected of them. Children learn by imitation. The result of such programming on cable is already disastrous; 10 and 12 year-olds raping 7 and 8 year-olds and 5 year-olds experimenting on 3 year-olds. The courts say they have never before seen such young rapists. Teachers report grade school children are acting out bizarre sex acts they have seen on cable the night before. More and more teenagers are experimenting with sexual intercourse. Young men are being programmed with the message of pornography: sex anytime, any where with anyone for immediate self-gratification. They are learning that sex is a violent act and that women enjoy forced sex. Date rapes and gang rapes are on the increase on college campuses.

Television is the greatest mind-molding influence in our world today. As recreational sex and violence take over the electronic media, our young people may never hear the message that marriage, commitment, dignity and respect for privacy are desireable and lead to deeply satisfying relationships. Dr. Park Dietz, a member of the Attorney General's Commission on Pornography, said a mad scientist could not have devised a better plan for creating a generation of sexual sadists. (Menlo Park, California Presbyterian Church, March, 1985)

PARENTAL CONTROL IS NOT THE ANSWER

With 36 million homes now using cable, children have an increasing likelihood of exposure. The arguments of lock boxes, program guides and parental supervision do not hold. Only one percent of cable subscribers order lock boxes and children across the nation have learned to unlock even those. Most people do not look at program guides before turning on cable television, but young boys can read them to determine when pornography will be aired and watch it when parents are away or asleep. Parental supervision exists for fewer and fewer children. Half the marriages are ending in divorce. Most parents must work. There are dozens of unsupervised cable television sets in most neighborhoods easily accessible to the children as they move from house to house.

If the body of R-rated materials which is waiting in the wings is released on network television, parents' only choice will be to give up television altogether. Yet still they won't be able to control what happens in other homes in the neighborhood.

PRINT MEDIA IS NOT THE SAME WORLD

The FCC is pushing relentlessly to give the electronic communications media the same standards as newspapers and other print media. But family newspapers decline to print even written descriptions of the obscene material it has allowed to be acted out in vivid color on television. From their inception, radio and television have had a stricter standard because they are more pervasive in our culture and are more readily accessible to children. They should not have the same standards because there are important differences between the two:

> The print media needs no permission or special license from the government to operate. By statute the broadcast and cable systems are charged to act as public trustees and have unique responsibilities to the public at large.

It costs nothing to begin a newspaper in your basement, but it costs volumes to put together a broadcast station.

The print media is elitist in the fact that one must be educated and literate in order to read. Broadcasting has a greater reach to the illiterate and the young and has far greater impact on children than the print media.

CONCLUSION

A 1973 United States Government memorandum on the content of programming on cable television systems (addressed to Complaint & Branch Enforcement Division, Mass Media Bureau, Federal Communications Commission) stated that "under the general public interest standard, the Commission has adopted Section 76, 215 (47 CFR Part 76) of the Rules and Regulations which prohibits cable operators engaged in origination from transmitting any obscene or indecent matter on any origination cablecasting channel or channels." A statement in a September 26, 1984 letter to Senator Lawton Chiles by FCC Mass Media Bureau Chief, James C. McKinney, gives a clue as to why obscene programming has never been prohibited. "The language of the opinion suggests that the Commission in fact possesses broad jurisdiction to regulate cable television, except to the extent it chooses not to exercise this power."

What the FCC and its leadership says is sometimes deceptive, but the real problem is what it does. Some have suggested that the leadership of the FCC needs is to be served with a Writ of Mandamus, a judicial order to carry out their duties and enforce the law.

In conclusion, because it is believed that the direction of the FCC would remain basically the same under the leadership of Alfred C. Sikes, as it has under the Mark Fowler-Dennis Patrick regime, a host of leaders in the pro-family movement urges the committee not to confirm the appointment of Sikes as Chairman of the FCC.

Senator **Inouye**. Ms. Coleman and gentlemen, I thank you very much. I have said this on many occasions, that the strength and security of our country will not be just determined by our military strength, but by physical, intellectual, and most importantly, our moral strength.

I have long supported and continue to support the Bill of Rights. But I must confess that there are times when my support is strained and I think now is the time, because as chairman of this committee I am well aware of the filth and garbage that America is almost required to view each day.

And I also know that, among grammar school students, they spend less than one hour a day doing homework, but about five hours a day watching television, and during most of that time, without any parental supervision because both parents are out working.

And I am also aware of the pornography and such that goes on.

I was surprised, Ms. Coleman, to hear you tell us about this radio station. Can you submit to this committee the name, the call number and the address of that radio station in Miami?

Ms. **Coleman**. Yes, sir, Mr. Chairman.

Senator **Inouye**. And also a tape if you do have one.

Ms. **Coleman**. Yes, sir.

Senator **Inouye**. And I shall see to it that the commission acts on it pronto.

Ms. **Coleman**. Thank you very much.

Senator **Inouye**. And, Reverend Moore, this committee has tried its best to spend time on children's television. We have taken certain initiatives toward that end.

Knowing the statistics as they exist today, I think your idea of more dramatically airing this is a good one. And I will discuss this matter with my colleagues and see if we cannot have a series of hearings fully televised, calling on people like you and others, and broadcasters, and airing this for the public to see. Because what is happening to America, especially to our young Americans, is criminal.

Mr. **Moore**. Thank you, Senator. I appreciate that.

Senator **Inouye**. With that I give you the thanks of this committee. At this time many members are not here, but as you know, we are in the midst of debating our defense authorization bill. And so I convey to you their regrets for not being here.

Senator Danforth.

Senator **Danforth**. Mr. Chairman, I have no questions.

But I would now yield to Senator Gore for any questions he might have.

Senator **Gore**. Thank you very much, Mr. Chairman. I know the hour is late and we have gone much longer than anticipated because, as one of my colleagues said, the hearing provided a forum for discussing a set of issues that the American people find extremely troubling and that have not been aired and that need to be discussed and need to be addressed by the Federal Communications Commission. And inasmuch as the nominees sent to us are supposed to be confirmed by this committee, or rather by the Senate, upon the recommendation of this committee, I think it is appropriate to have that discussion. Of course, we have discussed other issues as well.

But this panel comes appropriately to focus our attention once again on the concerns of at least 73 percent of the American people.

And, Mr. McAteer, you focus on that in your statement, and I would commend Ed McAteer's full statement to the members of this committee. Although he only presented a portion of it, I have had a chance to look at it as we have been sitting here, and you cite a long series of examples demonstrating, for one thing, that the kind of problem that Ms. Coleman spoke about—I was out of the room when you mentioned that, but I have been filled in on it, and the Chairman asked you about the radio station.

Mr. McAteer's statement illustrates that that is not unusual. That happens all the time and, indeed, I have had reports from constituents regularly about presentations exactly of that character just becoming commonplace, or more and more commonplace, because, as one of the nominees here today said, there is a market for it. And, of course, that is the reason that it continues, because there is nothing presently to impede it at all.

And, you know, I just want to reiterate a point that I made earlier. This is not the same thing as a book or a magazine. It is a limited, scarce right that is rationed by the Federal Government. And the Federal Government stands ready, willing and able, and has, on many occasions, used its authority to forcibly remove competition from anyone who wishes to use this limited portion of the electromagnetic spectrum that is assigned to an existing licensee.

Now, if the Federal Government does that to me—let us say I want to broadcast on any channel, any VHF channel that is presently on the dial in Washington, D.C., or any of the large cities in Tennessee. Then, I will be prevented from doing so by the Federal Government by the use of the Federal Government's police power.

Now, what does that do to my First Amendment rights? Well, it completely takes them away from me or you. If you wish to broadcast on any of those stations, you cannot use a single one of them.

Now, we accept that as rational, because if there were no restrictions at all, then this common resource would be unuseable. We accept it in the same way we accept red lights, and yellow and green lights at busy intersections. If there were none, then there would be grid lock. And the common resource of the streets would be unuseable in hours of congestion.

And so the Federal Government's role is not that threshold that applies where communication generally is concerned is automatically breached; automatically. The Federal Government's role is dictated by the technology itself. It is there. It has to be exercised.

So then the next question is, by what standard will this scarce resource be rationed to some as opposed to others? And the standard is very broad, and it is intentionally broad so as to have the Federal Government playing the least intrusive role possible.

But some standards exist, and some standards have to be there. And it cannot be just whoever gets there first, or whoever has the most money gets to have the Federal Government use its police and military power to prevent anybody else from using it. That cannot be allowed.

But, in effect, what we have had is precisely that. Whoever is there first gets to have the Federal Government actively remove any kind of competition on that part of the spectrum.

Now, that was not intended. What was intended was that it shall be given to a licensee for that licensee to serve in the public interest and to meet certain standards. It is not happening.

Now, I am not going to give another speech. I have already given a speech, but let me just ask the three of you a question, and I will start with you, Mr. McAteer.

And let me say to the committee that Mr. McAteer and I were political opponents, but in the process became personal friends. And though we disagree on a number of matters, we also agree on a number of matters, and we are, indeed, very good, personal friends, and I am delighted that you are here today.

But let me just ask you to respond first to this question, and then to the other panelists here.

A common response from the electronic media community, from the business people who are in that community is, look, you have got an effective counter to this. Just hit that on- and-off knob. Just turn it off, America. Why does that not solve the problem?

Now, I believe I know the answer to it, but I would like to hear the answer in your words.

Mr. McAteer. Well, Senator, first of all, as I mentioned in a more strident fashion as I was talking, we see in a casual observation of history that conduct rights are earned by responsible, moral conduct. And when a person or a group, or whoever's conduct rights undermine constitutional rights, they have been extended past what reason and what law, and even I believe, an intense study of our constitution allows. Obviously, you know, to me that is a cop out. They could turn it off.

That would be like, in my opinion, saying, well, let us have a dispenser for cocaine, and you know, you do not have to get it if you do not want to, just do not put the dollar or whatever it is to get a package of cocaine in there and then you will not get it. That is absurd.

When we see something like this, which as I said before, I believe is a greater threat to our nation right now than some of the other evils that we read so much about—the proof is out there.

Let me, if I may, without taking too much time and I have a tendency to do that, but my heart is full on this matter, say this if I may.

I understand that this is a hearing concerning nominees. But now, the thing that disturbs me, Senator, deeply, there were 300 of us—James Dobson, who is on 1,200 radio stations, Don Wile and myself, ACE school group out of Dallas, Texas, with 7,000 Christian schools. There were many of us, I understand—that could be checked out—300 letters that came in, asking this committee to consider a nominee who we believe would be the kind of person that would take a position on these.

I do not believe that there was a person that sat at this table up here are evil people. I do not believe that. They all seem to be a very decent people. But I am leaving here and I am getting on—I do not want to plug the airline, but I do not want to guess whether the person flying that plane or not—I believe a regulatory agency of the government has made real sure that that pilot passed his test before I get on that plane to protect me.

This is the concern that I have here now—disturbing to me is that a man that many of us felt definitely would get on this commission that would represent our concerns, we are being told they did not even know him.

Well, you know, my anger boils over when I hear that. Unbelievable, that 300 letters that came in to promote that man, or to recommend that man, and then be told that they did not know that. You know, we are talking like children.

So, coming back to your original question, that, I think I have explained that in our working together, Ray Moore, and this little lawyer. They do the spelling and I do the selling.

Mr. MOORE. Briefly, Senator, on the question of the fact that parents can, indeed, just switch off the channel, the court in FCC versus Pacifica, gave a ruling that a stricter treatment of broadcast material could be applied, because it was so intrusive and because of unique attributes of broadcasting, that it went right into the home, and can intrude into the privacy of the home without prior warning as to program content and is so uniquely accessible to children, even those too young to read.

And so the Supreme Court in *Pacifica* v. *FCC* in 1978, and I believe it was another case, *Sable Communications* v. *FCC* last year, has upheld the Communications Act of 1934, which gives the FCC rights to have a stricter interpretation of indecency, obscenity and profanity for broadcast communications.

So my answer is that the Constitution, the law and the Supreme Court have allowed this, and we should carry out the law.

Senator GORE. Ms. Coleman.

Ms. COLEMAN. Justice Stevens addressed the very question you raised in Pacifica, and he said that is like telling someone who has assaulted you, just run away, that you have no recourse. By the time you are aware of the profanity or the obscenity, it is too late to turn it off.

The second point is that at the present time the government licenses these broadcast stations to serve in the public interest, and that should be the bottom line. If we are going to license them to serve in the public interest, then they should fulfill that. If the government wishes not to regulate them and not license them, then that may be where we are.

Senator GORE. And the other obvious point is that there are tens of millions of children who are latch-key children and left unattended at all hours, who are a part of the public. And the licensees are required to serve their interest as well, and not just see them as resources.

And let me just say to those who feel that this is the concern of a prudish few, and that the natural evolution of a liberal, democratic society, small "l", small "d", is to move in the direction of freer and freer broadcasting standards, so that eventually everything becomes available. I just think that is nonsense.

And if your personal line has not been reached yet, just wait, because it will be. It will be. Anybody in this room—if your personal line has not been crossed yet as to what you think goes too far and makes you throw up your hands and say, wait a minute. If you have not reached that point yet, just wait. Just wait.

The movie industry has these ratings and some movies are rated "R." Is it okay for the broadcasters to take "R" rated movies and put them on in prime time and show them over the air? Does that cross your line? That has been done. That is being done.

In your statement, Mr. McAteer, you cite instances where that is done now. I know for a fact that it has been done in Nashville, Tennessee, and I know for a fact that if the FCC raises no objection, then that will become commonplace—the lowest common denominator.

What about X-rated movies over the air? Does that cross your line?

You say in your statement, Mr. McAteer, that there are lots of cable systems that show X-rated films and partially scramble the picture and allow the sound unimpeded into all homes within the area, and that the picture sometimes temporarily becomes unscrambled and the young kids in those areas gather round to watch it intently and to record the X-rated sound tracks for amusement and entertainment. Maybe that is just something to snicker at and laugh at.

Well, ladies and gentlemen in this hearing room, we have one million teen pregnancies a year. There is no other country in the world that even comes close to that kind of rate. I mean, what are we doing here? Do we care? Does anybody care?

Yes, the American people care. And yes, their elected representatives in the Congress care. And when the attention is focused on this issue, they express their concern. Under the law, the Federal Communications Commission is charged with implementing the standards embodied in the laws that address these questions.

And you are absolutely on target coming here and saying, look, we are going to have a changing of the guard at the FCC, a whole new regime here, and the biggest single concern on the part of the American people that lies within the jurisdiction of the FCC has been completely and totally mishandled and ignored during the past eight years. So now we have a changing of the guard, are we going to have a change in approach or not?

And so I think you are right on target by saying we ought to address this very, very carefully.

And as the hour is late, I will not belabor it further, because I have said what is on my mind, but I do again want to commend to my colleagues the full text of this statement, and I do not want to ignore the statements of the other two witnesses. I commend them as well.

But, thank you very much Mr. Chairman. I appreciate your indulgence and patience.

Senator INOUYE. Thank you, Senator Gore.

Senator Danforth—first, I would like to thank you, Ms. Coleman, Mr. McAteer, Reverend Moore, for staying with us all afternoon. I can assure you that your statements will have great bearing upon our future proceedings.

As you know, it is the responsibility of the subcommittee to look over the nominees, and I should tell you that all of the papers that are required by law have been filed and found to be appropriate and proper.

The Federal Bureau of Investigation has conducted its rather thorough investigation of the character and the security sensitivities of the nominees, and they have been found to be in proper form. And, accordingly, it is the intention of this Senator as Chairman of the subcommittee to report it to the full committee. Now, as to what the full committee will do, it is up to the full committee.

Senator Danforth. I thank you very much for your contribution this afternoon.

Senator DANFORTH. Mr. Chairman, thank you very much. I have no questions of the witnesses.

I would say that Al Sikes is my very dear personal friend of more than 21 years' standing. I have been in his home, he has been in mine. He has been in my employment twice. His wife has run my correspondence section for the last three years.

I, too, happen to be a clergyman. I baptized at least one of his children, and he is in every way a decent and commendable human being. I must say that I am less than enthusiastic about some of the testimony I have heard in the last hour or so.

Mr. Chairman, I would like to read into the record three letters which were sent to Senator Hollings, the first on the stationery of the Christian Broadcasting Network, Incorporated, dated July 31, 1989,

DEAR SENATOR HOLLINGS: I wish to strongly support the nomination of Alfred C. Sikes to the Federal Communications Commission.

In my opinion, Mr. Sikes is exceedingly well qualified to lead the FCC. He is experienced and has a proven track record of outstanding government service as Assistant Secretary for Communications and Information and NTIA, United States Department of Commerce. He is a very decent person with a high moral purpose. As a federal official, he is sworn to uphold the Constitution. I know that consistent with the FCC's authorities and responsibilities, he will vigorously enforce the law including importantly those relating to obscenity and indecency.

I am unqualified in my support for him, and I believe his nomination should be confirmed as expeditiously as possible.

Sincerely yours,

PAT ROBERTSON,
Chairman of the Board,
Chief Executive Officer.

The second letter is on the stationery of the National Religious Broadcasters. It is dated July 28, 1989.

DEAR SENATOR HOLLINGS: As you may know, the National Religious Broadcasters represent some 1,450 religious organizations that are active in program production and/or station ownership founded in 1944; the NRB is the only national association that is devoted exclusively to promoting the interest of religious broadcasters. Our membership includes approximately three-quarters of the organizations in the field.

In April of this year I visited Washington on behalf of the NRB and other organizations that share our concern regarding indecent programming over the nation's airwaves. During this visit I met with Al Sikes whose nomination to serve as Chairman of the FCC is currently pending before your committee. I interviewed him at length concerning his views on FCC policies dealing with the problem of indecency. On the basis of this interview and other information that I've received, I am convinced that Mr. Sikes is fully committed to the maintenance of a vigorous enforcement policy with regard to indecent programming.

In addition, I found him to be an individual of great integrity and high moral and religious standards who would be a credit to the office for which he has been nominated.

I should note that during my April visit to Washington I also interviewed Sherrie Marshall, who is also a nominee to serve on the FCC. Ms. Marshall similarly expressed a determination to vigorously enforce the Congressional ban on indecent programming. I found her to be a person of strong personal character and great integrity. I am also convinced that she would be an outstanding addition to the membership of the commission.

Sincerely yours,

BEN ARMSTRONG,
Executive Director.

The final letter is also on the stationery of National Religious Broadcasters. It is also dated July 28, 1989."

DEAR SENATOR HOLLINGS: It affords me great pleasure to commend for your favorable consideration the nomination of Mr. Al Sikes, nominee for the chairmanship of the Federal Communications Commission. I have personally known Mr. Sikes for more than 20 years. I have served for 26 years as General Superintendent of the General Council of the Assemblies of God, which has had its headquarters in Springfield, Missouri. For the past four years I have served as President of the Luzon Committee for World Evangelization in the United States under the honorary chairmanship of Dr. Billy Graham and the active chairmanship of Dr. Leyton Ford of Charlotte, North Carolina.

Mr. Sikes is a man of credibility and unquestioned integrity. He stands for the highest moral values. During his tenure as a public servant for the state of Missouri, he served with diligence in three important capacities. Mr. Sikes comes originally from Springfield, Missouri, where he was a man of outstanding credentials who has practiced law and served as a public servant in a very faithful way.

I can without reservation recommend him to you for your consideration. Thank you for allowing me to share my comments with you.

Most sincerely yours,

THOMAS F. ZIMMERMAN, *President,*
Luzon Committee for World Evangelization USA.

Mr. McAteer. Mr. Chairman, is it permissible to comment on that?

Senator INOUYE. Proceed.

Mr. MCATEER. I also am a very close friend of all three of these men. As a matter of fact, a week ago Sunday I had about an hour's conversation with Dr. Ben Armstrong. I just returned from Israel with him. He is one of the dearest friends that I have.

I also am a member of the NRB. We were discussing the hearings here today. I asked Ben this question, since he had misgivings about me being here. The question was this: Inasmuch as almost every year either Mr. Fowler or Mr. Patrick during the past eight years have been at our meetings, "Ben, are you happy with the way that Mark Fowler did things at the FCC as it concerns pornography, obscenity?" And he said, "Well, I am not."

I said, "How about Dennis Patrick?" Well, he explained that Patrick got involved in some legal suits on T.V. programming that he could not handle and thus could not effectively control program content.

I said to Ben, "To me it is inconceivable that a man that has been with Fowler Patrick eight years and yet has not taken a position on obscenity, would be qualified, for this job. Senator, I understand political patronage. I am not opposed to it, but this is bigger than someone being a campaign manager and being rewarded. This affects America. And whether it is Ben Armstrong or Pat Robertson or Billy Graham or Tom Zimmerman, they are wonderful people, but they are still just people. And the facts of the case are that we have got a problem in America. And the people who have been nominated here today, I knew the background of one of them. I only had one track record I could look at, and even though admittedly it was not complete, it inspired to come here, based on the problem that we are seeing, to at least voice my objection.

One person said to me—and I am through, Ed—the whole world is against you. I replied well, I am against the whole world, then, if it is a matter of what is right, and I hope that if nothing else, our coming here will say to these nominees that there are going to be some people out there who are watching what you are doing, since you are charged by the Congress to control program content. In all due respect, Senator, and to the committee here, I leave here with the same concerns that I had when I came, and I believe they are well-founded. Thank you very much.

Mr. MOORE. Mr. Chairman, could I make a brief comment?

Senator INOUYE. Proceed.

Mr. MOORE. I would hope Senator Danforth would not take it personally that we are opposing Mr. Sikes, and I believe that we refrained from any personal or negative comments about his character. In fact, I have strong reason to believe otherwise, that he is a very fine individual. But I was primarily here opposing his nomination because of his stated positions on deregulation, which are the same policies that were carried forth under the Fowler-Patrick regime, policies which have led to this great problem we are having in the country today.

And so, we feel that he is a fine gentleman, and we do hope that things will work out. It seems to be obvious that the committee is going to confirm these three nominees, and yet we hope that by being here today and protesting and saying no, let us take another look at this, that perhaps the three nominees themselves will examine our own testimony and our concerns and maybe make a great improvement over the last two gentlemen who were head of the FCC.

And the other factor that was somewhat encouraging us to be here that a broad-based pro-family coalition of many individuals contacted the White House on behalf of a candidate for one of the three FCC positions. This coalition represented some 20-25 million Evangelical Christians and pro-family voters, and this coalition was totally disregarded by the White House. These people supported a gentleman who had a proven record of dealing with the decency issue and who was eminently qualified as an attorney and as a broadcast specialist to serve on the FCC.

And so concerning these nominees, I came in here today to raise a question and say no, and I have not been persuaded myself from their testimony that I have just heard that I am far off the mark. Thank you.

Senator INOUYE. I can assure all of you that your concerns have not fallen on deaf ears and that your statements will be reviewed.

However, as I indicated earlier, all of the appropriate forms and necessary statements have been filed with this committee. The FBI has conducted its investigation and found nothing wrong in the character or background of any of the nominees.

Further, the chair of this subcommittee has not received any statement objecting to the nominees and, accordingly, if there is no objection, the subcommittee will report the nominations of the three nominees to the full committee. It is so ordered.

[Whereupon at 5:20 p.m., the committee adjourned, subject to the call of the Chair.]

[The following information was subsequently received for the record:]

State of Illinois,
Illinois Commerce Commission,
August 2, 1989.

Hon. Ernest Hollings,
Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

Dear Senator Hollings: During the confirmation process, a major area of concern raised by Members of the Committee has been the indecent programming broadcast over the airwaves. I would like to take this opportunity to make my position on this issue clear for the record.

I personally abhor the indecency and obscenity that pervades our society today. There is no question that preventing obscene and indecent broadcasts is a critical function of the FCC. The spectrum is a scarce resource, and the FCC has the obligation to ensure that those individuals granted the privilege to broadcast over that spectrum set the highest standards for decency.

I pledge that if confirmed as an FCC commissioner, I will do everything in my power under the law to ensure that licensees across the nation broadcast programs that comport with the highest moral standards of our society.

I am available to discuss this issue with you in more detail at your convenience.

Sincerely yours,

Andrew C. Barrett.

Family Research Council
T.M.
Gary L. Bauer, President

STATEMENT OF GARY L. BAUER, PRESIDENT, FAMILY RESEARCH COUNCIL

July 28, 1989

Three Federal Communications Commission vacancies at present -- and more in the near future -- are to be filled. The Family Research Council believes that these nominations are extremely important, not just for the moral fibre of our nation, but for the physical safety of our citizens.

The FCC has a valuable role to play in this interdependent age of ours, in which the channels of communication are more public than ever, and in which the certain choices in entertainment have impact far beyond the individuals who make those choices.

Yet we are concerned that the FCC has not in fact been living up to its duties. In 1987 it promulgated a regulation banning indecent programming between 6 AM to midnight. If that sounds nice, reflect that there was a law already on the books banning indecent programming throughout the 24 hours of the day. The only effect of the FCC regulation was to create a midnight-to-six "safe harbor" for broadcast sleaze, in defiance of Congress.

We alre also concerned that the FCC's enforcement practices are hampered by an archaic system for the processing of complaints. At present, only one FCC employees is assigned to this responsibility. Some legitimate complainst have languished in the FCC bottle-neck for almost four years.

The issue of pornography on the public airwaves and cable channels is becoming steadily more urgent. The past few years have seen an explosion of genres known as "shock radio" and "trash television." We believe that this trend poses a grave danger. If the danger were only to the personal morals of those who view or listen to such programs, it is arguable that there would then be no role for the FCC, or for any public policy-makers. But the fact is that such material influences behavior, and thus poses a threat to our entire society.

We must bear in mind the communications revolution that has taken place. Items of entertainment circulate today with a velocity that would have been incredible even ten years ago. The spread of VCRs and videotapes as a form of home entertainment over the past ten years, and the growth of cable TV, have brought about a veritable revolution in communications.

As a direct result of these changes, our society is confronted with problems it never had to face before. Questions which used to be in the exclusive province of private taste and private conscience have become social issues. The glib and facile line

"You don't have to watch it" may have had some relevance back when those with depraved and anti-social tastes had to go out of their way to satisfy themselves. But in our age, when producers and broadcasters pander to the vilest and most violent inclinations, such a crude individualism has to yield to the social realities.

Those realities include the following:

- Even with lock boxes, it is impossible for parents to screen out every broadcast that might tarnish the innocence of their children.

- Even parents who successfully protect their children from such materials have no assurance that those children will not be victimized by other people who have been corrupted by indecent materials within the regulatory purview of the FCC.

- A recent Gallup poll find that full a quarter of all parents with children under 18 living at home were frequently uncomfortable with the contents of television broadcasts, principally because of sex and violence. Only 17 percent said they never felt uncomfortable about TV program contents.

- Even non-parents have the right to be able to flip their dials without confronting material that, even ten years ago, would have been found only in the depths of the urban red-light districts. Those with perverted tastes can satisfy those tastes in other ways. There is no reason to place a burden of affirmative avoidance on those with ordinary, civilized tastes.

The airwaves belong to the public.

To provide a specific illustration of the problem, we are submitting a copy of a citizen complaint along with this testimony. This complaint is on file with the FCC, and is public material. We submit it not to pre-judge the particular station that stands accused, but rather to illustrate the degree of offensiveness with which we are concerned. While it pains us to include such language as part of our testimony, it is necessary to show that we are not talking about a mere off-color remark or two. Rather, the complaint -- and many others like it -- concern explicit and continuous pornographic dialogue.

Radio and television stations that broadcast materials such as those detailed in this complaint should be targeted by the FCC for license revocation and for such other penalties as the commission's duly promulgated regulations affords.

With regard to the nominations to the FCC currently before the Senate: the Family Research Council, along with out parent organizations, Focus on the Family, and other members of the pro-family community, are frankly upset that the nominees for the FCC vacancies were chosen with absolutely no regard for our concerns. Our interest in the FCC issue was well known, yet we were completely excluded from the process. We were not even afforded the courtesy of an explanation of that process.

It cannot escape our notice that the members of this Committee have been more hospitable to our concerns than the Administration that was put in place by the votes of our constituents.

Speaking for my own organization, I would add that these remarks do not necessarily reflect on the nominees themselves. Mr. Sikes has indicated that he shares our anguish over the use of the public airwaves and cable channels for exploitative bilge. We have not filed this testimony either to support or oppose his confirmation or that of his fellow nominees. Rather, we want to make clear the standards we expect him to uphold and the guidelines we expect him to follow.

A guiding consideration is that while the FCC has open to it the path of enforcing rules of decency through regulation, in fact, such enforcement is stymied as long as the commission lacks efficient internal system of procedure. The FCC's processing of complaints urgently needs reform.

To advance this goal, and to give the new members a workable idea of what we desire and expect, we submit the following standards and guidelines:

- a commitment to enforce the law as written, not circumvent it with regulations that sound like a step forward but are actually a step backward;

1. a commitment to use the powers of the FCC in an active fight against broadcast obscenity and indecency; - full implementation of the doctrine of the Supreme Court's 1978 decision in FCC v. Pacifica Foundation, 438 U.S. 726 (1978), which held that the powers of the FCC to restrict indecent material on the air goes beyond materials covered by the legal definition of obscenity as set forth in Miller v. California, 413 U.S. 15 (1973).

2. a commitment to filing actions against any radio or television station which violates FCC rules and regulations to any degree;

3. strict penalties against television and radio stations that violate federal standards. In this regard, we call for a study by the members of the Senate Commerce, Science and Transportation Committee and the members of the FCC to look at the penalties currently enforced. We suspect that penalties are too lenient and that monetary penalties could be raised.

4. a "rapid action requirement" for all complaints filed, such that each complaint must be immediately investigated, and suitable action taken, within eight months of the filing of the complaint. The President could institute such a requirement by executive order.

5. immediate action by the new chairman on presently pending complaints.

6. a commission clearinghouse for public information regarding complaints filed against stations across the country, the status of those complaints, the action undertaken by the commission, the penalties imposed, and the number of FCC violations by particular stations.

With action based on these goals, the pro-family community will be satisfied that its concerns have been addressed, even though it was not consulted.

If, on the other hand, enforcement by the FCC remains lax, there will then be a credibility gap that will take more than a Pledge of Allegiance to bridge.

Thank you very much.

DOW, LOHNES & ALBERTSON

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August 4, 1989

HAND DELIVERED

Honorable Daniel K. Inouye
Chairman, Subcommittee on Communications
SH-227 Hart Senate Office Building
Washington, D.C. 20510-6125

Dear Mr. Chairman:

This letter is prompted by testimony presented during the confirmation hearing for FCC nominees before the Senate Commerce Committee on July 31, 1989. I am informed that, during the course of such testimony, a statement or statements were made that "a Miami radio station announcer" was "soliciting boys for teenage homosexual sex." The accusation apparently was directed toward Radio Station WIOD, in Miami, Florida. This letter is written on behalf of Cox Enterprises, Inc., the ultimate parent company of WIOD, Inc., the licensee of WIOD. The public accusation made during the Senate Committee's hearing, if indeed it was directed toward WIOD, is untrue, and Cox respectfully requests that this letter be included as part of the formal record of that hearing.

At least since 1987, a Florida resident named John B. Thompson has been engaged in a personal dispute with Neil Rogers, who at that time was a disc jockey employed by another Miami radio station. That dispute erupted into a private civil lawsuit and a formal investigation by the State of Florida. Among the accusations made by Mr. Thompson against Mr. Rogers, fully investigated by the Office of the Florida State Attorney, was an allegation that "Mr. Neil Rogers is committing criminal solicitation for homosexual purposes of underage boys in Dade County in his [radio] broadcasts." Following its investigation, the Office of the State Attorney concluded:

> Our review of those materials indicates this is an inference that is only drawn by Mr. Thompson, and again there is no evidence that Mr. Neil Rogers is engaging in criminal solicitation.
>
> * * * *
>
> It was clear at the conclusion of our investigation that there were no criminal violations of Florida Law for us to proceed with. It was also clear that Mr. Thompson appears to have an obsessional hatred of Mr. Neil Rogers and his radio show. Mr. Thompson infers crimes and deviant sexual practices where others do not perceive them. Finally, Mr. Thompson is engaged in a civil suit with the owners of the radio station where Mr. Rogers is employed. This may or may not explain partially or in whole, why he is so obsessed in his continuing complaints against Mr. Neil Rogers.
>
> * * * *
>
> Through our investigation, we have determined there is no credible evidence to support the allegations made by Mr. Thompson.

A copy of the complete investigative report and conclusions of the Office of the State Attorney is attached to this letter as an Appendix.

WIOD was drawn into the dispute after it hired Mr. Rogers late last year. Since that time, Cox and WIOD, among others, have received virtually daily correspondence from Mr. Thompson essentially repeating the same allegations. Mr. Thompson has also filed an objection to the WIOD license renewal application with the FCC. The FCC has informed Mr. Thompson that the WIOD license renewal proceeding is restricted and subject to its ex parte rules. Following the pattern of the dispute during Mr. Rogers' employment at another Miami radio station, there are now pending civil lawsuits involving Mr. Rogers, WIOD and Mr. Thompson. (Mr. Thompson had also filed a complaint with the FCC concerning Mr. Rogers' former radio station employer, but has not pursued it after Mr. Rogers began to work for WIOD.)

Mr. Thompson's accusations concerning WIOD, which apparently precipitated the statement made before the Commerce Committee, are entitled to no greater consideration than the claims previously investigated, and rejected as baseless, by the Office of the Florida State Attorney. Mr. Thompson's current accusations against WIOD concerning solicitation of minors do not gain validity or merit by repetition.

WIOD management routinely monitors the station's broadcasts, and has reviewed Mr. Thompson's accusations of unlawful conduct and criminal activity. WIOD believes there is no basis to conclude that Mr. Rogers has engaged in criminal solicitation of minors in his WIOD broadcasts. The only apparent accuracy in Mr. Thompson's assertions is that Mr. Rogers openly admits, and has publicly declared, that he is a homosexual. Although Mr. Rogers' sexual preference and his public discussion about homosexuals obviously are offensive to Mr. Thompson, and indeed may be offensive to others, that constitutes no basis for claiming that Mr. Rogers or WIOD are engaging in unlawful conduct or practices.

That WIOD's broadcasts include discussion of topics that may be controversial or even distasteful to some listeners may be a proper subject of criticism, but it is not a proper basis upon which to claim unlawful or criminal conduct. If Mr. Thompson or witnesses before the Commerce Committee differ with WIOD's judgment as to the lawfulness of its programming, the Office of the Florida State Attorney is the appropriate forum to investigate a claim of "soliciting boys for teenage homosexual sex," just as that office was the proper forum for investigating Mr. Thompson's earlier allegations. Similarly, to the extent that federal issues are raised about WIOD's programming, those matters would be properly resolved by the FCC's review of the entire record. It represents no useful contribution to the resolution of a long-standing private dispute, nor is it even helpful in determining the constitutionally permissible scope of broadcast program material, for private parties or witnesses before the Commerce Committee to seek to have those issues resolved on the basis of incomplete facts and unsupported _ex parte_ testimony.

Respectfully submitted,

Werner K. Hartenberger

Werner K. Hartenberger
Counsel for Cox Enterprises, Inc.